

BIBLIOGRAFÍA SOBRE ANÁLISIS FITOLÍTICOS

Zucol A. F., Bertoldi de Pomar H., Osterrieth M. y M. Brea

Introducción:

El presente trabajo es el resultado de la recopilación bibliográfica que los autores y revisores han realizado en los pasados años como parte de sus actividades de investigación y docencia. El objetivo principal de esta recopilación es el de simplificar la tarea de búsqueda para todo interesado en esta área de estudio, como así también, el presentar en forma breve los artículos científicos realizados en las distintas aplicaciones de los análisis fitolíticos, y que ello sirva como marco de referencia para los investigadores que utilicen estos estudios directa o indirectamente.

Además de las recopilaciones personales, se ha contado con el apoyo de trabajos previos de recopilación, tales como los realizados por Bertoldi de Pomar y Passeggi (inédito), Mulholland, Lawlor y Rovner (1992), Rovner (inédito) y Runge (1998), que han sido de invaluable ayuda para este trabajo, como así también para la revisión de las referencias.

Esperamos que esta tarea pueda brindar a todo interesado un punto de referencia en la realización de sus investigaciones.

A

- Abbott, W.H. 1975. Miocene opal phytoliths and their climatic implication. *South Carolina Division of Geology. Geological Notes*, 2 : 43-47.
- Abbott, W.H. & G.W. Andrews. 1975. Miocene diatomaceous deposits of South Carolina and Georgias. *Geol. Soc. of Amer., (Abstracts)*, 7 (7) : 969.
- Abshagen, U. 1912. Untersuchungen über den Kieselgehalt von *Arundinaria japonica*. Diss., Kiel.
- Acquage D. K. & J. Tinsley. 1965. Soluble silica in soil. *Proc. 11th Easter School Agric. Sci. Univ., Exper. Pedol.* : 126-148.
- Adata, M.H. & R.T. Besford. 1986. The effects of silicon on cucumber plants grown in recirculating nutrient solution. *Ann. Bot.*, 58 : 343-351.
- Akai, S. 1938. On the ash figures of leaves of the rice plants grown under a combination-practice of several effective measures of the control of blast disease. *Annals of Phytopathological Society of Japan*, 7 : 173-192.
- Akai, S. 1939. On the ash figures of leaves of the rice plants transplanted from the different kinds of nursery beds and susceptibilities to the blast disease. *Annals of Phytopathological Society of Japan*, 9 : 223-235.
- Akai, S. 1953. Studies on *Helminthosporium* Blight of rice plant. VII. The relation of silicic acid supply to the outbreak of *Helminthosporium* Blight or blast disease in rice plants. *Annals of Phytopathological Society of Japan*, 17 : 109-112.
- Alarcon, C.; Colin, F. & J.D. Meunier. 1996. Origin of "Mascareignite": A 15 cm thick layer of phytolith in La Reunion Island soils. *1° Europ. Meeting on Phytolith Research (Abstracts)*, : 7.
- Albert, R.M. 1995 a. Nuevo sistema de análisis descriptivo para fitolitos de sílice. *Pyrenae*, 26 : 19-38.
- Albert, R.M. 1995 b. Phytolith analysis of Upper Paleolithic to Neolithic Firepits from two archaeological sites in the Northeastern Iberian Peninsula. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 9 (1) : 5.
- Albert, R.M. 1997. Phytoliths in wood ash. *The Phytolithien Newsletter*, 10 (2-3) : 5-6.
- Albert, R.M. & L.S. Cummings. 1996. Diet reconstruction through phytolith analyses: Study of mammoth teeth from the dent site (Colorado). *1° Europ. Meeting on Phytolith Research (Abstracts)*, : 38.
- Albert, R.M. & S. Weiner. 1998. Study of ash layers through the analysis of phytoliths. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 48.
- Albert, R.M.; Mangado, X. & A. Martin. 1996. Estudio sobre la conservación y disolución de fitolitos en sedimentos calcáreos. Análisis de una columna estratigráfica de la Cova del Frare (Matadepera, Barcelona). *1° Europ. Meeting on Phytolith Research (Abstracts)*, : 37.
- Albert, R.M.; Mangado, X. & A. Martin. 1997. Estudio sobre la conservación y disolución de fitolitos en sedimentos calcáreos. Análisis de una columna estratigráfica de la Cova del Frare (Matadepera, Barcelona). *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 187-196, Madrid.
- Albert, R.M.; Cummings, L.S.; Juan, J. & A. Martin. 1996. Anàlisi de fitòlits d'una llar neolítica: La Cova del Frare (Matadepera, Barcelona). *1 Congrés del Neolític a la Península Ibérica -Formació i implantació de les comunitats agrícoles- Gavà i bellaterra, 1995. Rubricatum (Gavà)*, 1 (1) : 123-129.
- Alexandre, A. 1993. Genèse et évolution des phytolithes dans le cycle biogéochimique de la silice en forêt équatoriale (Dimonika, Congo). *DEA, Université Aix-Marseille*.
- Alexandre, A.; Colin, F.; Koud J.M. & J. D. Meunier. 1996. Phytoliths as traces of plant impact on weathering processes. *1° Europ. Meeting on Phytolith Research (Abstracts)*, : 8.
- Alexandre, A.; Colin, F. & J. D. Meunier. 1994. Les phytolithes, indicateurs du cycle biogéochimique du silicium en forêt équatoriale. *C.R. Hebdomadaires Acad. Sci. Paris*, 319, serie II : 453-458.
- Alexandre, A.; Meunier, J. D.; Colin, F. & J. M. Koud. 1997. Plant impact on the biogeochemical cycle of silicon and related weathering processes. *Geochimica et Cosmochimica Acta*, 61 (3) : 677-682.
- Alexandre, A.; Meunier, J. D.; Lézine A-M.; Vincens A. & D. Schwartz. 1996. Grasslands dynamics in intertropical Africa during the Late Holocene: phytolith analysis. *1° Europ. Meeting on Phytolith Research (Abstracts)*, : 63.

- Alexandre, A.; Meunier, J.D.; Colin, F.; Koud, J.M.; Mariotti, A. & F. Soubies. 1998. Pedogenic processes and paleoenvironmental changes record in soil: Phytolith evidence. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 81.
- Alexandre, G.B.; Heston, W.M. & R.K. Iler. 1954. The solubility of amorphous silica in water. *Journal of Physical Chemistry* 58 : 453-455.
- Alexander, J. 1822. Blowing sand. *Edinburgh (New) Philosophical J.*, 7 : 404-405.
- Alexandrovskiy, A. & A. A. Golyeva. 1997. Paleosols of the Scythian time: phytolith studies. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 267-274, Madrid.
- Alexandrovskiy, A.; Golyeva, A.A.; Gunova, V.S. & N.A. Krenke. 1998. Ponds and pools in the landscape of medieval Moscow. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 55.
- Alferez Delgado, F. 1972. Importancia de los fitolitos en el estudio de los paleosuelos cuaternarios. *Col-Pa*, 22 : 56.
- Ammosova, Y.M.; Balabko, P.N.; Matychenkov, V.V. & N.A. Avetyan. 1990. Silica in the soil-plant system. *Agrokhimiya*, 10: 103-108.
- Amos, G.L. 1951. Some siliceous timbers of british Guiana. *Caribb. Forester* 12 : 133-137.
- Amos, G.L. 1952. Silica in timbers. *Aust. Comm. Sci. Ind. Res. Org., Bull. N° 267* : 1-55, Melbourne.
- Amos, G.L. & H.E. Dadswell. 1948. Siliceous inclusions in wood in relation to marine borer resistance. *Aust. Comm. Sci. Ind. Res. Org., J. Council Sci. Ind. Res.*, 21: 190-196.
- Anderson, P.C. 1998. Phytoliths as a line of evidence of use of the threshing sledge. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 46.
- Anderson, P.C. & H. Procopiou. 1996. Study phytolith as residue on plant-working tools, in containers or from plant products used as temper in wattle-and-daub and ceramic: Example and potential for the Neolithic and Bronze Age of Southwest Asia and Southeastern Europe. *1° Europ. Meeting on Phytolith Research (Abstract)*, : 39.
- Anderson-Gerfaud, P. 1985. Apports et limites des phytolithes. *Nouvelles de l'archéologie*, 18 : 48-55.
- Andrejko, M.J. 1977. Silicate structures in mineralogy of swagrass (*Cladium jamaicensis* Crantz) and its associated peats from the Florida everglades. *Florida Scientist*, 40 (suppl.) : 24.
- Andrejko, M.J. 1982. Notes on procedures for extraction and analysis of plant phytoliths. *The Phytolitharian Newsletter*, 1 (3) : 5.
- Andrejko, M.J. 1985. Geochemical problems with biogenic silica in peat deposits. *2nd Phytolith Conference (Abstracts)*, Duluth, *The Phytolitharian Newsletter*, 3 (3) : 7.
- Andrejko, M.J. & A.D. Cohen. 1984. Scanning electron microscopy of silicophytoliths from the Okefenokee swamp-marsh complex. En: Cohen A.D.; Casagrande, D.J.; Andrejko, M.J. & G.R. Best (eds.), "The Okefenokee Swamp: Its Natural History, Geology and Geochemistry, Wetland Surveys." : 468-491, Los Alamos, New Mexico.
- Andrejko, M.J.; Cohen, A.D. & R. Raymond Jr. 1983. Origin of mineral matter in peat. En: Raymond, R. Jr. & M.J. Andrejko (eds.), "Mineral Matter in Peat: Its Occurrence, Form, and Distribution." Los Alamos National Laboratory, Publication LA-9907-OBES: 3-24.
- Andrejko, M.J.; Gerberth-Jones, S.; Aulbach-Smith, C. & A.D. Cohen. 1981. SEM of common silicophytoliths for the correlation of peat types in the Southeastern U.S. *Geol. Soc. of Amer. (Abstracts)*, 13 (7) : 397.
- Arimura S. & I. Kanno. 1965. Some mineralogical and chemical characteristics of plant opal in soils and grasses of Japan. *Bull. Kyushu Agric. Experimental Station*, 11 (2) : 111-120.
- Armitage, P.L. 1975. The extraction and identification of opal phytoliths from the teeth of Ungulates. *Jour. Archaeol. Sci.*, 2 (3): 187-197.
- Arnott, H.J. 1982. Calcium oxalate (weddelite) crystals, in forest litter. *Scanning Electron Microscopy*, 4: 1141-1149, O'Hara, Illinois.
- Arnott, H.J. 1976. Calcification in higher plants. En: Watabe, N. & W.M. Wilbur (eds.), "The Mechanisms of Mineralization in the Invertebrates and Plants." University of South Carolina Press, : 55-78, Columbia, South Carolina.
- Arnott, H.J. 1973. Plant calcification. En: Zipkin, I. (ed.), "Biological Mineralization." : 609-627, Wiley, New York.
- Arriaga, M.O. 1981. El uso de caracteres histofoliales en el estudio de hábitos alimentarios de Acridiidae. I. *Physis*, 39 (97) : 61-74.
- Arriaga, M.O. 1981. El uso de caracteres histofoliales en el estudio de hábitos alimentarios de Acridiidae. II. *Physis*, 40 (98) : 1-13.
- Arriaga, M.O. 1986. Metodología adaptada al estudio de hábitos alimentarios en insectos herbívoros. *Museo Arg. de Cs. Nat. "B. Rivadavia" -Bot.-*, 2 N° 15.
- Artschwager, E. 1925. Anatomy of vegetative organs of sugarcane. *J. Agric. Res.*, 30 (3) : 197-221.
- Artschwager, E. 1930. A comparative study of the stem epidermis of certain sugarcane varieties. *J. Agric. Res.*, 41 (12) : 853-865.
- Artschwager, E. 1940. Morphology of vegetative organs of sugarcane. *J. Agric. Res.*, 60 (8) : 503-549.
- Artschwager, E. 1942. A comparative analysis of vegetative characteristics of some variants of *Saccharum spontaneum*. *US Department of Agriculture Technical Bulletin*, 811 : 1-55.
- Aston, S.R. 1983. Natural water and atmospheric chemistry of silicon. En: Aston, S.R. (ed.), "Silicon Geochemistry and Biochemistry." : 77-100, Academic Press, London, New York etc.
- Ayensu, E.S. 1972. *Anatomy of Monocotyledons. VI. Dioscoreales*. Oxford University Press, Clarendon.

B

- Baas, P.; Van Oosterhoud, E. & C.J.L. Scholters. 1982. Leaf anatomy and classification of the Olacaceae, *Octoknema* and *Eryltropalum*. *Allertonia* 3 (2) : 155-210.
- Baba, I. 1956. Studies on the nutrition of the rice plant with special reference to nitrogen and silica. *Proc. Crop Sci. Soc. Japan*, 24 : 29-33.
- Baba, I.; Iwata, I.; Takahashi, Y. & A. Kittaka. 1956. Studies on the nutrition of the rice plant with reference to *Helminthosporium* leaf spot. XI. Absorption and translocation of nutrients as influenced by soil moisture and humidity. *Proc. Crop Sci. Soc. Japan*, 24 : 169-172.
- Baenziger M. 1996. The deposition of opal phytoliths in the sinus cavity of extinct *Mammuthus* sp. *Phytolith Research Symposium, 1996 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 9 (3) : 10.
- Baenziger M. & T. Dillehay. 1994. Methods for identifying opal phytoliths: Monte Verde, a case study of panicoids. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 8 (2) : 5.
- Bailey, J.W. 1856. On the non-existence of polarizing silica in the organic kingdom. *Amer. J. Sci. Arts*, 21 (36) : 357-358.

- Bair, R.A. 1966. Leaf silicon in sugarcane, field corn and St. Augustinegrass grown on some Florida soils. *Florida Soil and Crop Sci. Soc., Proc.*, 26 : 64-70.
- Baker, E.A. & E. Pearsons. 1971. Scanning electron microscopy of plant cuticles. *J. Microscopy*, 9 : 39-49.
- Baker, G. 1959 a. Fossil opal phytoliths and phytolith nomenclature. *Aust. J. Sci.*, 21 (9) : 305-306.
- Baker, G. 1959 b. Opal phytoliths in some Victorian soils and "Red Rain" residues. *Aust. J. Bot.*, 7 (1) : 64-87.
- Baker, G. 1959 c. A contrast in the opal phytolith assemblages of two Victorian soils. *Aust. J. Bot.*, 7 (1) : 88-96.
- Baker, G. 1959 d. Cause of wear in sheep's teeth. *Nature*, 184 : 1583-1584.
- Baker, G. 1960 a. Phytoliths in some Australian dusts. *Royal Soc. Victoria, Proc.*, 72 : 21-40, Melbourne.
- Baker, G. 1960 b. Fossil opal phytoliths. *Micropaleontology*, 6 (1) : 79-85, New York.
- Baker, G. 1960 c. Hook-shaped opal phytoliths in the epidermal cells of goats. *Aust. J. Bot.*, 8 (1) : 69-74.
- Baker, G. 1960 d. Phytolitharien. *Aust. J. Sci.*, 22 (9) : 392-393.
- Baker, G. 1961 a. Opal phytoliths and adventitious mineral particles in wheat dust. *Mineragraphic Investigations Technical Paper*, 4 : 3-12.
- Baker, G. 1961 b. Opal phytoliths from sugar cane, San Fernando, Philippine Islands. *Memoirs of the Queensland Museum*, 14 (1) : 1-12, Queensland Museum, Brisbane.
- Baker, G. 1961 c. Opal phytoliths in weath dust. *Comm. Sci. Ind. Res. Org. Min. Inv. Tech. Pap.* 4.
- Baker, G. 1968. Microforms of hay-silica glass and of volcanic glass. *Mineralogical Magazine*, 36 : 1012-1023.
- Baker, G. & A.J. Gaskin. 1946. Natural glass from Macedon, Victoria and its relationships of other natural glasses. *Jour. Geol.*, 54 : 88-104.
- Baker, G. & G.W. Leeper. 1958. Phytoliths in Victorian soils. *Aust. Jour. of Sci.*, 21 (3) : 84.
- Baker, G.; Jones, L.H.P. & A.A. Milne. 1961. Opal uroliths from a ram. *Aust. Jour. Agr. Res.*, 12 (3) : 473-482.
- Baker, G.; Jones, L.H.P. & I.D. Wardrop. 1959. Cause of wear in sheep's teeth. *Nature*, 184 : 1583-1584.
- Baker, G.; Jones, L.H.P. & I.D. Wardrop. 1961. Opal phytoliths and mineral particles in the rumen of the sheep. *Aust. Jour. Agr. Res.*, 12 (3) : 462-472.
- Balabko, P.N.; Prikhodka, V.E. & Y.M. Ammosova. 1980. Silica bioliths in plants and certain forest soils. *Biologicheski Nauki (Moscow)*, 12 : 92-96.
- Balan Menon, P.K. 1965. Guide to distribution of silica in Malayan woods. *Malayan Forester*, 28 : 284-288.
- Ball, T.B. 1992. The effect of varying environmental conditions on phytolith morphometries in two species of grass (*Bouteloua curtipendula* and *Panicum virgatum*). *Scanning Electron Microscopy*, 6 (4) : 1163-1181.
- Ball, T.B. 1993 a. Notes on preparing stained phytolith assemblages. *The Phytolitharien Newsletters*, 7 (2) : 2-3.
- Ball, T.B. 1993 b. Phytolith morphometrics: The use of image analysis for morphology and systematic study of wheat phytoliths. *58th Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharien Newsletter*, 7 (3) : 6.
- Ball, T.B. 1996. Identifying phytoliths produced by the inflorescence bracts of wheat and barley using computer-assited image and statistical analysis. *Phytolith Research Symposium, 1996 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 9 (3) : 10.
- Ball, T.B. & J.D. Brotherson. 1992. The effect of varying environmental conditions on phytolith morphometries in two species of grass *Bouteloua curtipendula* and *Panicum virgatum*. *Scanning Microscopy*, 6 (4) : 1163-1181.
- Ball, T.B.; Brotherson, J.D. & J.S. Gardner. 1993. A typologic and morphometric study of variation in phytoliths from Einkorn wheat (*Triticum monococcum*). *Can. J. Bot.*, 71 (9) : 1182-1192.
- Ball, T.B.; Gardner, O.S. & N. Anderson. 1998. Identifying inflorescence phytoliths from selected species of wheat (*Triticum monococcum*, *T. dicoccum*, *T. dicoccoides* and *T. aestivum*) and barley (*Hordeum vulgare* and *H. spontaneum*). *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 66.
- Ball, T.B.; Gardner, J.S. & J.D. Brotherson. 1996 a. Analysis of the effect of varying environmental conditions on the amount and location of silica accumulation in the lamina of the grass *Panicum virgatum* L. *The Phytolitharien Newsletters*, 10 (3) : 3-7.
- Ball, T.B.; Gardner, J.S. & J.D. Brotherson. 1996 b. Identifying phytoliths produced by the inflorescence bracts of three species of wheat (*Triticum monococcum* L., *T. dicoccum* Schrank and *T. aestivum* L.) using computer assisted image and statistical analyses. *J. Archaeol. Sci.*, 23 : 619-632.
- Ball, T.B.; Standing, M. & W.M. Hess. 1994. Three-D microscopy and image analysis of phytoliths. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 8 (2) : 4.
- Bamber, R.K. & J.W. Lanyon. 1960. Silica deposition in several woods of New South Wales. *Tropical Woods* 113 : 48-54.
- Barber, D.A. & M.G.T. Shone. 1964. The uptake and distribution of silica in excised roots and intact plants. *Agric. Res. Council Radiobiological Lab. Report*, 12 : 42-50.
- Barber, D.A. & M.G.T. Shone. 1966. The absorption of silica from aqueous solution by plants. *J. Exp. Bot.*, 17 : 569-578.
- Barboni, D.; Bonnefille, R.; Alexandre, A. & J.D. Meunier. 1998. Phytoliths as paleoenvironmental indicators, West side, Middle Awash Valley (Ethiopia). *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 31.
- Bardin, S.W. & D.L. Bish. 1983. The occurrence of calcium oxalate minerals within aquatic macrophytes from Okefenokee Swamp. En: Raymond, R. Jr & M.J. Andrejko (eds.), "Mineral Matter in Peat: Its Occurrence, Form and Distribution". Los Alamos National Laboratory, Publication LA-9907-OBES : 53-62.
- Baretta-Kuipers, T. 1976. Comparative wood anatomy of Bonnetiaceae, Theaceae and Guttiferae. "Wood Structure in Biological and Technological Research." *Leiden Botanical Series*, 3 : 76-101. Leiden, University Press.
- Bargagli-Petrucchi, S.G. 1902. Concrezioni silicee intracellulari nel legno secondario di alcune dicotiledoni. *Malpighia*, 17: 23-27.
- Barkworth, M.E. 1981. Foliar epidermis and taxonomy of North American Stipeae (Gramineae). *Syst. Bot.*, 6 : 136-152.
- Barkworth, M.E. & J. Everett. 1987. Evolution in the Stipeae: Identification and relationships of its monophyletic taxa. En: Soderstrom, T.R.; Hilu, D.W.; Campbell, C.S. & M.E. Barkworth (eds.), "Grass Systematics and Evolution." Smithsonian Institution Press, : 251-264, Washington D.C.

- Barthlott, W. & B. Martens. 1979. Cuticular-Taxonomie der Gräser eines westafrikanischen Savannengebietes unter dem Aspekt der Futterpräferenzanalyse wildlebender Gross-Säuger. *Tropische und Subtropische Pflanzenwelt* 30, Akademik der Wissenschaften und der Literatur, Math.Nat. Klasse, Mainz.
- Bartlett, A.S.; Barghoom, E.S. & R. Berger. 1967. Fossil opal maize from Panama. *Science*, 165 (3891) : 389.
- Bartoli, F. 1983. The biogeochemical cycle of silicon in two temperate forest ecosystems. *Environ. Biogeochem. Ecol. Bull.*, 35: 469-476.
- Bartoli, F. 1985. Crystallochemistry and surface properties of biogenic opal. *Jour. Soil Sci.*, 36 (3) : 335-350.
- Bartoli, F. & B. Guillet. 1977. Etude comparée des diagrammes phytolithiques et polliniques d'un podzol des Vosges gréseuses. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 284 (5) : 353-355.
- Bartoli, F. & M. Selmi. 1977. Sur l'évolution du silicium végétal en milieux pédogenetique aérés acides. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 284 (4) : 279-282.
- Bartoli, F. & B. Souchier. 1978. Cycle and role of biogenetic silica in temperate forest ecosystems. *Ann. Sci. forestières*, 35 (3) : 187-202.
- Bartoli, F. & L.P. Wilding. 1980. Dissolution of biogenic opal as a function of its physical and chemical properties. *Soil Sci. Soc. Amer., Proc.*, 44 : 873-878.
- Bartoli, F.; Jeanson, P. & M. Doirisse. 1976. Isolement et caractérisation de la silice biologique (phytolithes) présente dans les feuilles, les litières et les sols en milieu aéré acide (Vosges gréseuse). *CNRS-CPB, Document N° 21*.
- Bartolome, J.W.; Klukkert, S.E. & W.J. Barry. 1986. Opal phytoliths as evidence for displacement of native californian grassland. *Madroño*, 33 (3) : 217-222.
- Beavers, A.H. & R.L. Jones. 1962. A fractionator for silt. *Soil Sci. Soc. Amer., Proc.*, 26 : 303.
- Beavers, A.H. & R.L. Jones. 1963. What fossils and minerals tell us about the origin and history of soils. *Illinois Research*, 5 (3) : 8-9.
- Beavers, A.H. & I. Stephen. 1958. Some features of the distribution of plant opal in Illinois soils. *Soil Sci.*, 86 (1) : 15.
- Benayas Casares, J. 1963. Disolución parcial de sílice orgánica en suelos. *Anales de edafología y agrobiología*, 22 (11-12) : 623-626.
- Benbasat, E. 1976. Studies on opaline silica deposition in the vegetative organs of some Poaceae grasses in Bulgaria. *Fitologiya (Bulgarska Akademiya Na Naukite)*, 5 : 75-90.
- Bengtsson, L.; Drotz, M.; Hediund, J.; Heilberg, K.; Olausson, M. y J. Risberg. 1996. Phytolith analysis as a tool in archaeological research. *1° Europ. Meeting on Phytolith Research (Abstract)*, : 41.
- Bennett, D.M. 1982 a. An ultrastructural study on the development of silicified tissues in the leaf tip of barley (Hordeum sativum Jess). *Ann. Bot.*, 50 (2) : 229-237.
- Bennett, D.M. 1982 b. Silicon deposition in the roots of Hordeum sativum Jess., Avena sativa L. and Triticum aestivum L. *Ann. Bot.*, 50 : 239-245.
- Bennett, D.M. & D.W. Parry. 1980. Electron-probe microanalysis studies of silicon in the elongating basal internodes of Avena sativa (L.), Hordeum sativum (Jess.) and Triticum aestivum (L.). *Ann. Bot.*, 45 : 541-547.
- Bennett, D.M. & D.W. Parry. 1981. Electron-probe microanalysis studies of silicon in the epicarp hairs of the caryopses of Hordeum sativum Jess., Avena sativa L., Secale cereale L. and Triticum aestivum L. *Ann. Bot.*, 48 : 645-654.
- Bennett, D.M. & A.G. Sangster. 1981. The distribution of silicon in the adventitious roots of the bamboo Sasa palmata. *Can. J. Bot.*, 59 : 1680-1684.
- Bennett, D.M. & A.G. Sangster. 1982. Electron-probe microanalysis of silicon in the adventitious roots and terminal internode of the culm of Zea mays. *Can. J. Bot.*, 60 (10) : 2024-2031.
- Berghaus, A. 1842. On falls of dust on vessels traversing the Atlantic. *Edinburgh (New) Philosophical J.*, 32 : 134-136.
- Bergström, L. 1996. Silicophytoliths and soil. Results from a methodological study and research of soil from structure taken during excavation in Vendel, Uppland, Sweden. *1° Europ. Meeting on Phytolith Research (Abstract)*, : 40.
- Bertoldi de Pomar, H. 1969. La micropaleontología continental en los estudios edafológicos. *Actas 5° Reunión Arg. Cienc. Suelo*, : 727-730.
- Bertoldi de Pomar, H. 1970. Fitolitos y zoolitos. Su significado geológico en sedimentos continentales. *Boletín de la Asoc. Geol. de Córdoba*, 1 (1) : 21-31.
- Bertoldi de Pomar, H. 1971. Ensayo de clasificación morfológica de los silicofitolitos. *Ameghiniana*, 8 (3-4) : 317-328.
- Bertoldi de Pomar, H. 1972. Opalo organógeno en sedimentos superficiales de la llanura Santafesina. *Ameghiniana*, 9 (3) : 265-279.
- Bertoldi de Pomar, H. 1974. Silicobiolitos en sedimentos de cauces fluviales correntinos. *1° Congreso Argentino de Paleontología y Estratigrafía, Actas*, : 633-639.
- Bertoldi de Pomar, H. 1975. Los silicofitolitos: Sinopsis de su conocimiento. *Darwiniana*, 19 (2-4) : 173-206.
- Bertoldi de Pomar, H. 1976. Métodos de preparación de sedimentos clásticos para su estudio microscópico. I. Tratamientos previos. *Rev. Asoc. Cienc. Nat. Lit.*, 7 : 1-55.
- Bertoldi de Pomar, H. 1980. Análisis comparativo de silicobiolitos de diversos sedimentos continentales Argentinos. *Rev., Asoc. Geol. Arg.*, 35 (4) : 547-557.
- Bertoldi de Pomar, H. 1983. Silicobiolitos en sedimentos del cauce del río Paraguay. *Rev. Asoc. Cienc. Nat. Lit.*, 14 (1) : 53-62.
- Bertoldi de Pomar, H. & N.M. Tur. 1970. Células silicificadas en gramíneas acuáticas. *Revista de la Asociación de Cienc. Nat. del Litoral*, 1 : 17-18.
- Bertrand, D. 1973. A propos de l'origine de la silice des graminées. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 277: 857-859.
- Besson, A. 1946. Richesse en cendres et teneur en silice des bois tropicaux. *L'Agronomie Tropicale*, 1 (1) : 44-56.
- Bezeau, L.M.; Johnston, A. & S. Smoliak. 1966. Silica and protein content of mixed prairie and fescue grassland vegetation and its relationship to the incidence of silica urolithiasis. *Can. J. Plant Sci.*, 46 : 625-631.
- Birchall, J.D. 1995. The essentiality of silicon in biology. *Chemical Society Reviews*, 24 : 351-357.
- Blackman, E. 1968. The pattern and sequence of opaline silica deposition in rye (Secale cereale L.). *Ann. Bot.*, 32 : 207-218.
- Blackman, E. 1969. Observations on the development of the silica cells of the leaf sheath of wheat (Triticum aestivum). *Can. J. Bot.*, 47 (6) : 827-838.

- Blackman, E. 1971. Opaline silica in the range grasses of Southern Alberta. *Can. J. Bot.*, 49 : 769-781.
- Blackman, E. & D.W. Parry. 1968. Opaline silica deposition in rye (*Secale cereale* L.). *Ann. Bot.*, 32 (125) : 199-206.
- Blanchard, E. & J. Chaussin. 1933. Le blé plante à silice. *C.R. Hebdomadaire Acad. Sci. Paris, ser.D, Sci. Nat.*, 197: 188-190.
- Blinnikov, M.S. 1994. Phytolith analysis and holocene dynamics of alpine vegetation. *Veröffentlichungen des Geobotanischen Instituts der Eidgenössisch Technischen Hochschule, Stiftung Rübel, Heft 115* : 23-40, Zurich.
- Blinnikov, M.S. 1998. A new 100,000 yr. phytolith record described from loess and paleosols of the Columbia Basin, Washington State, USA. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 25.
- Bobrov, A.A. 1996. Phytoliths in soils: content, distribution along a soil profile, stability, information value. *1° Europ. Meeting on Phytolith Research (Abstracts)*, : 9-10.
- Bobrov, A.A.; Bobrova, E.K. & J.E. Alexeev. 1998. Biogenic silica in biosystematics- potentialities of using. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 68.
- Bobrov, A.A.; Khilimoniuk, Y. & K. Chemerovskaya. 1991. Accumulation of biogenic silica in southern taiga soils of different age. *Pochvovedenie*, 8 : 137- 141.
- Bobrova, E. 1996. An experience of classification of phytoliths of Cyperaceae, Gramineae, Pinaceae for using in soil bioindicators. *1° Europ. Meeting on Phytolith Research (Abstracts)*, : 11.
- Bobrova, E. & A.A. Bobrov. 1997. Phytoliths in soils: species composition, distribution along a soil profile, and value as environmental indicators. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 514, Madrid.
- Bobrova, E. & A.A. Bobrov. 1998. Phytoliths spectra of soils with texture differentiated profiles. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 83.
- Boettinger, J.L. 1994. Biogenic opal as an indicator of mixing in an alfisol/vertisol landscape. En: Ringrose-Voase, A.J. & G.S. Humphreys (eds.): "Soil micromorphology: Studies in management and genesis." : 17-26. Elsevier, Amsterdam.
- Bombin, M. 1980 a. Uso de silicofitolitos para correlación estratigráfica y paleoecológica en el Cuaternario Superior del Sureste de Suramérica. *III Coloquio sobre Paleobotánica y Palinología, Mem., INAH México*, 86 : 109-112.
- Bombin, M. 1980 b. The principles of phytolith analysis and late Quaternary phytoliths from eastern Beringia. *5th Annual Palynological Conference, Proc., (Abstracts)*, 5 : 49.
- Bombin, M. 1985. SEM observations of phytolith biosilica. *Proc. of the Electron Microscopy Society of South Africa*, 15 : 65-66.
- Bombin, M. & K. Muchlenbachs. 1980. Potential of $^{18}\text{O}/^{16}\text{O}$ ratios in opaline plant silica as a continental paleoclimatic tool. *American Quaternary Association, 6th Biennial Meeting (18-20.8.1980), Abstracts*, 6 : 43-44, Toronto.
- Bonnett, O.T. 1972. Silicified cells of grasses: A major source of plant opal in Illinois soils. *Agricultural Experiment Station, Bulletin 142*, University of Illinois at Urbana-Champaign, College of Agriculture.
- Borger-Peters, I. 1971. Opalphytolithe. *Informationsblatt Nachbarwissenschaften der Vor- und Frühgeschichte 2, Botanik 3*: 1-3.
- Borissow, G. 1924. Über die eigenartigen Kieselkörper in der Wurzelendodermis bei *Andropogon*-Arten. *Berichte der Deutschen Botanischen Gesellschaft* 42 : 366-380.
- Borissow, G. 1925. Rasdorskys Körperchen beim Ravenna-Gras. *Berichte der Deutschen Botanischen Gesellschaft* 43 : 178-184.
- Bowdery, D. 1985. Phytolith studies in Australian prehistory. *The Phytolitharien Newsletter*, 3 (3) : 45.
- Bowdery, D. 1989. Phytolith analysis: Introduction and applications. En: Beck, W.; Clark, A. & L. Head (eds.): "Plants in Australian Archaeology", Tempus 1 : 161-196, Anthropology Museum, University of Queensland.
- Bowdery, D.; Hart, D.M.; Lentfer, C. & L.A. Wallis. 1998. The universal phytolith key. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 74.
- Bozarth, S.R. 1985 a. The potential for identifying maize in archaeological sites with silicified ringed tracheids produced in cobs of selected maize varieties. *The Phytolitharien Newsletter*, 3 (2) : 3.
- Bozarth, S.R. 1985 b. Distinctive phytoliths from various dicot species. *2nd Phytolith Conference (Abstracts), Duluth, The Phytolitharien Newsletter*, 3 (3) : 6-7.
- Bozarth, S.R. 1986. Morphologically distinctive *Phaseolus*, *Cucurbita*, and *Helianthus annuus* phytoliths. En: Rovner, I. (ed.): "Plant Opal Phytolith Analysis in Archaeology and Paleocology", *Occasional Papers No. 1 of the Phytolitharien*, : 56-66, Raleigh, North Carolina State University.
- Bozarth, S.R. 1987 a. Diagnostic opal phytoliths from rinds of selected *Cucurbita* species. *American Antiquity*, 52 (3) : 607-615.
- Bozarth, S.R. 1987 b. Opal phytolith analysis of edible fruits and nuts native to the Central Plains. *The Phytolitharien Newsletter*, 4 (3) : 9-10.
- Bozarth, S.R. 1987 c. Opal phytolith analysis of Daub. *The Phytolitharien Newsletter*, 5 (1) : 10-11.
- Bozarth, S.R. 1988. Preliminary opal phytolith analysis of modern analogs from parklands, mixed forest, and selected conifer stands in Prince Albert National Park, Saskatchewan. *Current Res. in the Pleistocene*, 5 : 45-46.
- Bozarth, S.R. 1990. Diagnostic opal phytoliths from pods of selected varieties of common beans (*Phaseolus vulgaris*). *American Antiquity*, 55 (1) : 98-104.
- Bozarth, S.R. 1992. Classification of opal phytoliths formed in selected dicotyledons native to the Great Plains. En: Rapp, G.Jr. & S.C. Mulholland (eds): "Phytolith Systematics. Emerging Issues", *Advances in Archaeological and Museum Science 1* : 193-214.
- Bozarth, S.R. 1993 a. Biosilicate assemblages of boreal forests and Aspen Parklands. En: Pearsall, D.M. & D.R. Piperno (eds.): "Current Research in Phytolith Analysis: Applications in Archaeology and Paleocology". Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 95-107, University of Pennsylvania, Philadelphia.
- Bozarth, S.R. 1993 b. Maize (*Zea mays*) cob phytoliths from a central Kansas Great Bend aspect archaeological site. *Palins Anthropologist*, 38 : 279-286.
- Brandenburg, D.M.; Russell, S.D.; Estes, J.R. & W.F. Chissoe. 1985. Backscattered electron imaging as a technique for visualizing silica bodies in grass. *Scanning Electron Microscopy*, 4 : 1509-1517.
- Brandis, D. 1907. Remarks on the structure of bamboo leaves. *Royal Linn. Soc., Trans., Series 2, Botany 7* : 69-92.

- Braune, W.; Leman, A. & H. Taubert. 1994. Pflanzenanatomisches Praktikum I. Zur Einführung in die Anatomie der Vegetationsorgane der Samenpflanzen. 7. Aufl., Fischer Verlag Jena, Stuttgart.
- Brazler, J.D. & G.L. Franklin. 1961. Identification of hardwoods. *Forest Prod. Res. Bull.* 46.
- Brazle, F.K.; Harbers, L.H. & C.E. Owensby. 1979. Structural inhibitors of big and little bluestem digestion observed by scanning electron microscopy. *J. Animal Sci.*, 48 (6) : 1457-1463.
- Brewer, R. 1955 a. Mineralogical examination of a yellow podzolic soil formed on granodiorite. *Soil Publication N° 5*, CSIRO, Melbourne.
- Brewer, R. 1955 b. The occurrence of diatom skeletons and sponge spicules in the soils of New South Wales. *Aust. J. Sci.*, : 177-179.
- Brochier, J.E. 1986. Estudi geoarqueològic dels dipòsits holocens de la Balma de la Margineda: capes de 1 a la 6. En: *Les excavacions a la Balma de la Margineda, 79-1991, edition bilingue catalan-français*, 1 : 56-90.
- Brochier, J.E. 1996. Feuilles ou fumier? Observations sur le rôle des poussières, sphérolitiques dans l'interprétation des dépôts archéologiques holocènes. *Anthropozoologica*, 24 : 19-30.
- Brown, D.A. 1984. Prospects and limits of a phytolith key for grasses in the central United States. *J. Archaeol. Sci.*, 11 (4) : 345-368.
- Brown, D.A. 1986 a. Taxonomy of a midcontinent grassland phytolith key. En: Rovner, I. (ed.): *"Plant Opal Phytolith Analysis in Archaeology and Paleoecology."* Occasional Papers No. 1 of the Phytolitharien, : 67-85, Raleigh, North Carolina State University.
- Brown, D.A. 1986 b. Geographic and taxonomy aspects of research design for opal phytolith analysis in the midcontinent plains. En: Rovner, I. (ed.): *"Plant Opal Phytolith Analysis in Archaeology and Paleoecology."* Occasional Papers No. 1 of the Phytolitharien, : 89-102, Raleigh, North Carolina State University.
- Brown, F.B.H. 1920. The siliceous skeleton of tracheids and fibers. *Torrey Bot. Cl., Bull.*, 47 : 407-424.
- Brown, W.V. 1958. Leaf anatomy in grass systematics. *Bot. Gaz.*, 119 : 170-178.
- Bryant, V.M. Jr. 1993. Phytolith research: A look toward the future. En: Pearsall, D.M. & D.R. Piperno (eds.): *"Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology."* Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 175-181, University of Pennsylvania, Philadelphia.
- Brydon, J.E.; Dore, W.G. & J.S. Clark. 1963. Silicified plant astherosclereids preserved in soil. *Amer. Soil Sci. Soc., Proc.*, 27: 476-477.
- Buckler, N.E.S.; Pearsall, D.M. & T.P. Holtsford. 1994. Zinc iodide and centrifugation allow rapid, inexpensive phytolith separation. *The Phytolitharien Newsletter*, 8 (3) : 2-3.
- Bukry, D. 1979. Comments on opal phytoliths and stratigraphy of Neogene silico-flagellates and coccoliths at Deep Sea Drilling Project Site 397 off northwest Africa. En: Sharnack, J.D. (ed.): *"Initial Reports of the Deep Sea Drilling Project 49"*, : 977-1009, Washington D.C., U.S. Government Printing Office.
- Bukry, D. 1980. Opal phytoliths from the tropical eastern Pacific Ocean, deep sea drilling project leg 54. En: Rosendahl, B.R.; R. Hekinian et al. (eds.): *"Initial Reports of the Deep Sea Drilling Project"*, 54 : 575-589, Washington D.C., U.S. Government Printing Office.
- Bulirsch, A. 1893. Ausscheidungen von Kieselsäure in der Blattepidermis einiger Bromeliaceen. *Justs Jahrbuch I.*
- Burgess, P.F. 1965. Silica in Sabah timbers. *Malay. Forester* 28 : 223-229.
- Bush, M.B.; Colinvaux, P.A.; Wiemann, M.C.; Piperno, D.R. & K.-B. Liu. 1991. Late Pleistocene temperature depression and vegetation change in Ecuadorian Amazonia. *Quaternary Research*, 34 : 330-345.
- Buurman, P. 1972. Mineralization of fossil wood. *Scripta Geol.*, 12 : 1-43.
- Buurman, P.; Van Breemen N. & S. Henstra. 1973. Recent silicification of plant remains in acid sulphate soils. *N. Jb. Miner. Mh.*, :117-124.

C

- Cáceres, M.R. 1950. Los caracteres anatómicos foliares de Munroa mendocina y Blepharidachne benthamiana. *Rev. Arg. Agron.*, 17 (4) : 233-240.
- Cáceres, M.R. 1951. La anatomía foliar de Scleropogon brevifolius y sus relaciones taxonómicas. *Rev. Arg. Agron.*, 18: 129-135.
- Cáceres, M.R. 1956. Los caracteres histofoliares de Schismus barbatus y sus relaciones taxonómicas. *Rev. Arg. Agron.*, 23: 109-114.
- Cáceres, M.R. 1958. La anatomía foliar de las Pappophoreae de Mendoza y su valor taxonómico. *Rev. Arg. Agron.*, 25 : 1-11.
- Callado, C.H.; Cunha, M. da Lins, U.G.C. & C.G. Costa. 1996. Siliceous inclusions in the secondary xylem in Beilshmidtia taubertiana (Schwack et Mez.) Kosterm (Lauraceae). *IAWA Journal*, 17 (3) : 25.
- Campos, A.C. De & L.G. Labouriau. 1969. Corpos silicosos das gramíneas dos Cerrados II. *Pesq. Agropec. Bras.*, 4 : 143-151.
- Campos, S.; Del Puerto, L. & F. Crespo. 1998. Opal phytolith analysis: Its applications to the archeobotany record in the east of Uruguay. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 56.
- Cane, A.K. 1967. An inert supporting medium for crostat use and a method for the prolonged preservation of permanently labelled unfixed frozen tissues. *J. Sci. Technol.*, 13 : 62-66.
- Carbone, V.A. 1977. Phytoliths as paleoecological indicators. *Ann. New York Acad. Sci.*, 288 : 194-205.
- Carroll, D.C. 1931. Mineralogy of the fine sand fractions of some Australian soils. *Journal of the Royal Society of Western Australia*, 18 : 125.
- Carter, J.A. 1994. Phytolith analysis in paleoenvironmental reconstruction in New Zealand. *The Phytolitharien Newsletter*, 8 (3) : 3-4.
- Castelletti, L. 1972. Contributo alle ricerche paleobotaniche in Italia. 1ª. *Lomb.* 106 : 331-374.
- Cavalcante, P.B. 1968. Contribuição ao estudo dos corpos silicosos das gramíneas Amazonicas I. Panicoideae (Melinideae, Andropogoneae, e Tripsaceae). *Boim Mus. Paraense "Emílio Goeldi", Botânica* 80 : 1-11.
- Chaffey, N.J. 1983. Epidermal structure in the ligule of rice Oryza sativa L.). *Ann. Bot.*, 52 : 13-21.
- Chapman, F. & H.J. Grayson. 1903. On "red rain", with special reference to its occurrence in Victoria with a note on Melbourne dust. *Vict. Nat. Melb.*, 20 : 17-32.
- Chapuis, J.L. 1980. Méthodes d'étude du régime alimentaire du Lapin de Garenne, Oryctolagus cuniculus (L.) par l'analyse micrographique des fèces. *Terre Vie*, 34 (2) : 159-198.
- Chattaway, M.M. 1948. The wood anatomy of the Proteaceae. *Aust. J. Scient. Res., Ser. B*, 1 : 279-302.
- Chattaway, M.M. 1953. The occurrence of heartwood crystals in certain timbers. *Aust. J. Bot.*, 1 : 27-38.

- Chattaway, M.M. 1955. Crystals in woody tissues: Part I. *Tropical Woods*, 102 : 55-74.
- Chattaway, M.M. 1956. Crystals in woody tissues: Part II. *Tropical Woods*, 104 : 100-124.
- Chatters, R.M. 1963. Siliceous skeletons of wood fibers. *Forest Prod. J.*, 13 : 368-372.
- Chen, C.H. & J. Lewin. 1969. Silicon as a nutrient element for *Equisetum arvense*. *Can. J. Bot.*, 47 : 125-131.
- Chen, B.; Zhang, J. & B. Lue. 1995. Discovery of rice phytoliths in the neolithic site at Jiahu of Henan Province at its significance. *Chinese Sci. Bull.* 40 (14) : 1186-1191.
- Cheng, B.T. 1982. Some significant functions of Si to higher plants. *Journal of Plant Nutrition*, 5 (12) : 1345-1353.
- Cheng, P.C. & H.G. Kim. 1989. The use of x-ray contact microradiography in the study of silica deposition in the leaf blade of maize. *Amer. J. Bot.*, (supl.) 76 : 29.
- Chermazone, H. 1926. Sur la structure de la feuille chez le *Fimbristylis miliacea*. *Bull. Soc. Bot. Fr.*, 73 : 260-269.
- Cherouvrier, A.; Gueguen, A. & J.C. Lefeuvre. 1975. Essai de détermination du régime alimentaire d'animaux herbivores a l'aide des phytoliths siliceux des Graminées et des Cypéracées. Description apres étude en microscopie électronique a balayage, des principaux types. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 281 (12) : 839-842.
- Chevaux, J.M. & P.F. Puech. 1998. SEM analysis of exogenous deposits on dental surface. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 42.
- Chowdbury, K.A. & S.S. Ghosh. 1954. Plant remains from Hastinapura. *Ancient India*, 10 : 120-137.
- Ciochon, R.; Piperno, D.R. & R. Thompson. 1990. Opal phytoliths found on the teeth of the extinct ape *Gigantopithecus blacki* Implications for paleodietary studies. *Nat. Acad. Sci., Proc.*, 87 : 8120-8124.
- Clark, C.A. & F.W. Gould. 1975. Some epidermal characteristics of paleas of *Dichanthelium*, *Panicum*, and *Echinochloa*. *Amer. J. Bot.*, 62 (7) : 743-748.
- Clayton, R.N. 1992. Silica-carbonate isotopic temperature calibration. *Science*, 258 : 1162-1163.
- Cody, A.M. & H.T. Horner. 1984. Crystallographic analysis of cristal images in Scanning Electron Micrograph and their application to phytocrystalline studies. *Scanning Electron Microscopy*, 1984 (3) : 1451-1460.
- Collins, S.; Rapp, G. Jr. & J.A. Gifford. 1982. Phytoliths. En: Rapp G. Jr. & J.A. Gifford (eds.): "Archeological Geology of Troy." Princeton Univ. Press.
- Collins, S.; Rapp, G. Jr. ; Gifford, J.A.; Rondina, D. & M. Thomson. 1986. Phytolith analyses of samples from Voyageurs National Park, Minnesota. En: Lynott, M.J.; Richner, J.J. & M. Thompson (eds.): "Archeological Investigations at Voyageurs National Park: 1979 and 1980", Midwest Archeological Center, Occasional Studies in Anthropology 16: 363-398.
- Colliot, G.; Anderson, P.C. & N. Bonnet. 1996. Shape recognition applied to analysis of phytolith. 1° *Europ. Meeting on Phytolith Research (Abstract)*, : 42.
- Colliot, G.; Anderson, P.C. & N. Bonnet. 1997. Preliminary classification of phytolith shapes using computerized image analysis and pattern recognition. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 275-288, Madrid.
- Comhaire, M. 1966. The role of silica for plants. *Agric. Digest*, 7 : 9-19.
- Commoner, B. & M.L. Zucker. 1953. Cellular differentiation: An experimental approach. En: Loomes, W.E. (ed.): "Growth and Differentiation in Plants". : 339-392, Ames, Iowa.
- Coombs, J. & B.E. Volcani. 1968. Studies on the biochemistry and fine structure of silica shell in diatoms. Chemical silicon induced by metabolic transients in *Navicula pelliculosa*. *Planta* 80 : 264-279, Berlin.
- Cooper, H. 1930. Ash constituents of pasture grasses, their standard electrode potentials and ecological significance. *Plant Physiology*, 5 : 193-215.
- Coppenet, M.; Ducet, G.; Guerillot, J. & E. Kahane. 1947. Sur la silice de la paille et du grain de blé. *Annales Agronomiques N.S.*, 17 : 564-567.
- Coughlin, E.A. & C. Classen. 1982. Siliceous and microfossil residues on stone tools: a new methodology for identification and analysis. En: Gramly, R.M. (ed.), "The Vail Site: a Palaeo-Indian encampment in Maine." *Bull. Buffalo Society of Nat. Sci.*, 30 : 161-169.
- Cremoni, N.; Rucker, C. & P. Verdin. 1998. Comparison between distribution of dental micro-striations and phytoliths contained in the calculus of human teeth. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 41.
- Cromack, K.; Sollins, P.; Graustein, W.C.; Speidel, K.; Todd, A.W.; Spycher, G.; Li, C.Y. & R.L. Todd. 1979. Calcium oxalate accumulation and soil weathering in mats of the hypogeous fungus *Hysterangium crassum*. *Soil Biol. Biochem.*, 11: 463-468.
- Crüger, H. 1857. Westindische Fragmente. *Bot. Ztg.* 15 (17) : 281-292, 297-308.
- Cuatrecasas, J. 1961. A taxonomic revision of the Humiriaceae. *Contr. U.S. natn. Herb.* 35 : 25-214.
- Cummings, L.S. 1989. Diet and nutritional stress in two ancient chritian sudanese Nubian population: The coprolite record. *Archaeobotany through phytolith analysis symposium, Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharien Newsletter*, 6 (1) : 5.
- Cummings, L.S. 1992. Illustrated phytoliths from assorted food plants. En: Rapp, G. Jr. & S.C. Mulholland (eds.): "Phytoliths Systematics, Emerging Issues", Advances in Archaeological and Museum Science, 1 : 175-192.
- Cummings, L.S. 1993. Phytoliths as indicators of subsistence: coprolite and features. 58th *Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharien Newsletter*, 7 (3) : 7.
- Cummings, L.S. 1994. Preparation of reference specimens for phytoliths. *The Phytolitharien Newsletter*, 8 (2) : 11-12.
- Cummings, L.S. 1995 a. Volcanic ash in phytolith samples. *The Phytolitharien Newsletter*, 9 (2) : 5-6.
- Cummings, L.S. 1995 b. Paleoenvironmental interpretation for the Mill Iron Site, based on stratigraphic pollen and phytolith analysis. En: Frison, C.G (ed.), "the Mill Iron Site, 24CT30 and the Goshen-Plainview Paleoindian cultural complex on the Northern High Plains." cap. 9. Univ. of New Mexico Press.
- Cummings, L.S. 1995 c. Coprolites contain phytoliths too: Anasazi diet at Step House, Mesa Verde. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 9 (1) : 5.
- Cummings, L.S. 1995 d. An inexpensive mounting medium for phytoliths. *The Phytolitharien Newsletter*, 9 (2) : 3.

- Cummings, L.S. 1995 e. Volcanic ash in phytolith samples. *The Phytolithien Newsletter*, 9 (2) : 56.
- Cummings, L.S. 1996. State of the phytolith research around the world. 1° *Europ. Meeting on Phytolith Research (Abstracts)*, : 3.
- Cummings, L.S. 1998. Phytoliths and food. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 39.
- Cummings, L.S. & R.S. Madole. 1996. A detailed comparison of phytolith from several midlatitude grasses, isotope values and the corresponding paleosol records from Northeastern Colorado. 1° *Europ. Meeting on Phytolith Research (Abstracts)*, : 65.
- Cummings, L.S. & A. Magennis. 1996 a. Phytoliths and paleosols on the Plains of Northeastern Colorado. *Phytolith Research Symposium, 1996 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 9 (3) : 11.
- Cummings, L.S. & A. Magennis. 1996 b. A phytolith and starch record of food and grit in Mayan human tooth tartar. 1° *Europ. Meeting on Phytolith Research (Abstracts)*, : 43.
- Cummings, L.S. & A. Magennis. 1997. A phytolith and starch record of food and grit in Mayan human tooth tartar. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 211-218, Madrid.
- Cutler, D.F. 1969. *Anatomy of the Monocotyledons. IV. Juncales*. Oxford, Clarendon Press, 357 p.
- Czaja, A.T. 1978. *Stärke und Stärkespeicherung bei Gefäßpflanzen - Versuch einer Amylo-Taxonomie*. Gustav Fischer Verlag, Stuttgart, New York.

D

- Darbyshire, S.J. & S.G. Aiken. 1986. *Zizania aquatica* var. *brevis* (Poaceae): A 1983 distribution survey and a scanning electron microscope study of epidermal features. *Naturaliste Canadien (Rev. Ecol. Syst.)*, 113 : 355-360.
- Darwin, C. 1846. An account of the fine dust which often fall on vessels in the Atlantic Ocean. *Quat. J. Geol. Soc., London*, 2: 26-30.
- Darwin, C. 1890. *Geological observations on the volcanic Islands and parts of South America visited during the voyage of H.M.S. "Beagle"*. 3rd Edition, Londres.
- Davies, I. 1959. The use of epidermal characteristics for the identification of grasses in the leafy stage. *British Grassland Soc. Jour.*, 14 : 7-16.
- Dayanandan, P. & P.B. Kaufman. 1973 a. Stomata in *Equisetum*. *Can. J. Bot.*, 51 : 1555-1564.
- Dayanandan, P. & P.B. Kaufman. 1973 b. A scanning electron microscope study of isolated guard cells. *Proceedings of the Electron Microscopy Society of America, 31st Annual Meeting*, : 454-455.
- Dayanandan, P. & P.B. Kaufman. 1976. Trichomes of *Cannabis sativa* L. (Cannabinaceae). *Amer. J. Bot.*, 63 : 578-591.
- Dayanandan, P.; Kaufman, P.B. & C.I. Frank lin. 1983. Detection of silica in plants. *Amer. J. Bot.*, 70 (7) : 1079-1084.
- Dayanandan, P.; Hebard, F.V.; Baldwin, V.D. & P.B. Kaufman. 1977. Structure of gravity-sensitive sheath and internodal pulvini in grass shoots. *Amer. J. Bot.*, 64 (10) : 1189-1199.
- De Araujo, P.A. & A. De Mattos Filho. 1974 a. Estrutura das madeiras brasileiras de angiospermas dicotiledoneas VII Proteaceae (*Panopsis sessifolia* (Rid.) Sandw.). *Rodriguesia*, 39 : 61-71.
- De Araujo, P.A. & A. De Mattos Filho. 1974 b. Estrutura das madeiras brasileiras de angiospermas dicotiledoneas VIII Proteaceae (*Panopsis rubescens* (Pohl.) Pittier). *Rodriguesia*, 39 : 71-85.
- Decker, H.F. 1964. An anatomic-systematic study of the classical tribe Festuceae (Gramineae). *Amer. J. Bot.*, 51 (4) : 453-463.
- Deflandre, G. 1963. Les phytolithaires (Ehrenberg). Nature et signification micropaléontologique, pédologique et géologique. *Protoplasma*, 57 : 234-259.
- Delhon, C.; Alexandre, A.; Meunier, J.D.; Berger, J.F.; Brochier, J.L. & S. Thiebault. 1998. Phytolith assemblages analysis as a promising tool for reconstructing mediterranean Holocene vegetation changes. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 27.
- Demaster, D.J. 1981. The supply and accumulation of silica in marine environments. *Geochimica et Cosmochimica, Acta* 45: 1715-1732.
- Dengler, N.G. & E. Y-C. Lin. 1980. Electron microprobe analysis of the distribution of silicon in the leaves of *Selaginella emmeliana*. *Can. J. Bot.*, 58 : 2459-2466.
- Denton, M.F. 1983. Anatomical studies of the Luzulae group of *Cyperus* (Cyperaceae). *Syst. Bot.*, 8 : 250-262.
- De Paula, J.E. 1975. Anatomia de *Euterpe oleracea* Mart. (Palmae de Amazônia). *Acta Amazonica*, 5 (3) : 265-278.
- De Paula, J.E. & J.L. De Hamburgo Alvez. 1973. Anatomia de *Anacardium spruceanum* Bth. ex Engl. (Anacardiaceae da Amazônia). *Acta Amazonica*, 3 : 39-53.
- De Pernia, N.E. 1987. Cristales y sílice en maderas dicotiledóneas de Latino América. *Pittieria*, 15 : 13-65.
- Dickson, W.E. 1972. Anatomical studies in the Connaraceae II. Woody anatomy. *J. Elisha Mitchell scient. Soc.* 88 : 120-136.
- Diester-Haass, L.; Schrader, H.J. & J. Thiede. 1973. Sedimentological and paleoclimatological investigations of two pelagicooze cores off cape barbas. *Northwest Africa Meteor. Forschung-Ergebnisse*, 16 : 19-66.
- Dimbleby, G.W. 1978. *Plants and archaeology*. Atlantic Heights, New Jersey, Humanities Press, 190 p.
- Dinan, E.H. & R.M. Rowlett. 1993. Vegetational changes at the Shriver Paleo- Indian site, N.W. Missouri: phytolith analysis as an aid in environmental reconstruction. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 73-82, University of Pennsylvania, Philadelphia.
- Dinesman, L.G.; Kiseleva, N.K. & A.V. Knyasev. 1989. The history of steppe ecosystems in Mongolia. *Istoriya stepnykh ekosistem MNR, Nauka, Moskau*.
- Dinsdale, D.; Gordon, A.H. & S. George. 1979. Silica in the mesophyll cell walls of Italian rye grass (*Lolium multiflorum* Lam. cv. RvP). *Ann. Bot.*, 44 : 73-77.
- Di Paola, E. C. & M. Gonzalez. 1992. Silicofitolitos en secuencias continentales terciario-pleistocenas de la Provincia de San Luis. *Rev. Asoc. Geol. Arg.*, 47 (1) : 111-112.
- Djain, A. & M.D. Pathak. 1967. Role of silica in resistance to Asiatic Rice Borer, *Chilo suppressalis* (Walker), in rice varieties. *J. Ec. Entomol.*, 60 : 347-351.

- Dobrovolsky, G.V.; Bobrov, A.A.; Golyeva, A.A. & S.A. Shoba. 1988. The opal phytoliths in biogeocoenoses of the middle taiga. *Nauchnye Doklady Vysshei Shkoly, Biologischeskie Nauki*, 2 : 96-101.
- Doggett, H. 1970. *Sorghum*. London, Longmans Green. 512 p.
- Donohue, J.A. & E.H. Dinan. 1993. A geoarchaeological analysis of phytolith data from the Bear Creek site, Cedar County, Missouri. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 83- 94, University of Pennsylvania, Philadelphia.
- Doolittle W.E. & C.D. Frederick. 1991. Phytoliths as indicators of prehistoric maize (*Zea mays* subsp. *mays* Poaceae) cultivation. *Plant Syst. and Evol.*, 177 (3-4) : 175-184.
- Dore, W.G. 1960. Silica deposits in leaves of Canadian grasses. *Can. Soc. Agron., Proc. (of the 6th Annual Meeting, Guelph, Ontario)*, 6 : 96-99.
- Dore, W.G. 1967. The glass in grass. Greenhouse Garden Grass. *Can. Dep. Agric.*, 6: 1-6.
- Dormaer, J.F. & I.E. Lutwick. 1968. Biogenetic opal in soils as an index of vegetation history in the Prairie-Peninsula. En: "The Quaternary of Illinois", Univ. Ill. Coll. Agr., Spec. Publ. 14.
- Dormaer, J.F. & L.E. Lutwick. 1969. Infrared spectra of humic acids and opal phytoliths as indicators of paleosols. *Can. J. Soil Sci.*, 49 : 29-37.
- Douchaufour, P. 1990. Humification, formation of organo-mineral complexes and influence on pedogenesis. *Tagungshand.*, 5: 16-22.
- Douchaufour, P.; Mathieu-Sigaud, A. & G. Millot. 1951. Nature et origine de la silice de l'horizon cendré des podzols. *Ann. Agr. Dec.*, 1951 : 818-824.
- Doutrelepont, H.; Vrydaghs, L.; De Langhe, E.; Janssens, B.; Swennen, R.; Mbdida, Ch. & P. De Maret. 1996. Banana in Africa. 1° *Europ. Meeting on Phytolith Research (Abstarct)*, : 27.
- Douval Jouve, M.J. 1872. Sur une forme de cellules epidermiques qui paraissent propres aux Cyperacees. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 75 : 371-372.
- Douval Jouve, M.J. 1875. Etude histotaxique des *Cyperus* de France. *Acad. Sci. Let. Montpell.*, 8 : 287-297.
- Drees, L.R.; Wilding, L.P.; Smeck, N.E. & A.L. Senkayi. 1989. Silica in soils: quartz and disordered silica polymorphs. En: Dixon, J.B. & S.B. Weed (eds.), "Minerals in Soil Environments." Soil Science Society of America, N° 1, 2nd Edition, : 913- 974, Madison.
- Drum, R.W. 1968 a. Silification of Betula woody tissue in vitro. *Science*, 161 : 175-176.
- Drum, R.W. 1968 b. Electron microscopy of opaline phytoliths in *Phragmites* and other gramineae (Abstracts). *Amer.J. Bot.*, 55: 713.
- Drum, R.W. 1968 c. Petrification of plant tissue in the laboratory. *Nature*, 218 : 784-785.
- Dumitrica, P. 1973. Phytolitharia. En: Kaneps, A.G. (ed.), "Initial Reports of the Deep Sea Drilling". Project 13, N° 2 : 940-943, Washington DC, U.S. Government Printing Office.
- Dunn, M.E. 1983. Phytolith Analysis in Archaeology. *Midcontinental J. Archaeol.*, 8 (2) : 287-297.
- Dunnell, R.C. 1971. *Systematics in prehistory*. New York, Free Press. 214 p.

E

- Edman, G. & E. Söderberg. 1929. Auffindung von Reis in einer Tonscherbe aus einer etwa fünftausendjährigen Chinesischen Siedlung. *Geol. Soc. China, Bull.*, 8 : 363-365.
- Edwards, W.N. 1935. The systematic value of cuticular characters in recent and fossil angiosperms. *Biol. Rev.*, 10 : 442-459.
- Ehrenberg, C.G. 1841 a. Über verbreitung und Einfluss des mikroskopischen lebens in Süd und Nordamerika. *Monatsber. Preuss. Akad. Wiss. Berlin*, : 139-144.
- Ehrenberg, C.G. 1841 b. Nachtrag zu dem Vortage über Verbreitung und Einfluss des mikroskopischen lebens in Süd und Nordamerika. *Monatsber. Preuss. Akad. Wiss. Berlin*, : 202-209.
- Ehrenberg, C.G. 1843. Verbreitung und Einfluss des mikroskopischen lebens in Süd und Nordamerika. *Abhandl. Berlin Akad., Berlin* (25 März und 10 Juni).
- Ehrenberg, C.G. 1845 a. On the muddy deposits at the mouths and deltas of various rivers in Northern Europe, and the infusorial animalcules found in those deposits. *Quarterly Journal of the Geological Society of London*, 1 : 251-257.
- Ehrenberg, C.G. 1845 b. Über ein aus feinsten kieselmehl von Fevertländer. En: "Neue untersuchungen über das kleinste leben als geologisches moment". Auszug aus einem vortage in der Königl. Akad. Wiessensch zu Berlin, : 11-12.
- Ehrenberg, C.G. 1845 c. Weitere untersuchungen des atmosphärischen staubes aus dem atlantischen Ocean an der Caprerdischen Inseln. *Monatsber. Berlin Akad.*, 27/02/1845 : 12-14.
- Ehrenberg, C.G. 1846 a. Über die vulkanischen Phytolitharien der Insel Ascension. I. *Monats. Bericht., Berlin*, : 96-101.
- Ehrenberg, C.G. 1846 b. Über die vulkanischen Phytolitharien der Insel Ascension. II. *Monats. der Königlich Preussischen Akademie der Wissenschaften zu Berlin* : 191-202.
- Ehrenberg, C.G. 1846 c. Über die unkrystallinen kieseltheile von pflanzen besonders über spongilia erinacea. *Bericht der Königlich Preuss. Akadem. der Wissenschaften zu Berlin*.
- Ehrenberg, C.G. 1846 d. Zusätze zu den Mittheilungen über die vulkanischen Phytolitharien der Insel Ascension. *Monats. Königlich Preuss. Akad. Wissensch., Berlin* : 191-202.
- Ehrenberg, C.G. 1847. Passatstaub und Blutregen. *Abhandlung der Deutschen Akademie der Wissenschaften*, : 269-460.
- Ehrenberg, C.G. 1848. On organic substances, recognizable by the microscope, found in the meteoric ashes which fell on the 1st of May 1812 in the island of Barbados and changed day into night. *Quarterly Journal of the Geological Society of London*, 4 (2) : 19-23.
- Ehrenberg, C.G. 1854 a. Das erden und felsen schaffende Wirken des Unsichtbar kleinen selbständigen lebens auf der Erde. *Bd. I: Text. Bd. II: Atlas*. Leipzig.
- Ehrenberg, C.G. 1854 b. *Mikrogeologie*. Bd. I: Text. Bd. II: Atlas. Leopold Voss, Leipzig.

- Eleuterius, L.N. & F.C. Lanning. 1987. Silica in relation to leaf decomposition of Juncus roemerianus. *Journal of Coastal Research*, 3 (4) : 531-534.
- Ellis, R.P. 1976. A procedure for standardizing comparative leaf anatomy in the Poaceae. I. The leaf blade as viewed in transverse section. *Bothalia*, 12 : 65-109.
- Ellis, R.P. 1979. A procedure for standardizing comparative leaf anatomy in the Poaceae. II. The epidermis as seen in surface view. *Bothalia*, 12 (4) : 641-671.
- Ellis, R.P. 1987. A review of comparative leaf blade anatomy in the systematics of the Poaceae: The past twenty-five years. En: Soderstrom, T.R.; Hilu, K.W.; Campbell, C.S. & M.E. Barkworth (eds.), "Grass Systematics and Evolution." Smithsonian Institution Press, : 3-10, Washington D.C.
- Engel, W. 1953. Untersuchungen über die Kieselsäure-Verbindungen im Roggenhalm. *Pflanz*, 41 : 358-390.
- Engler, A. & K. Prantl. 1889. Proteaceae. En: *Natürl. PflFam.*
- Epstein, E. 1994. The anomaly of silicon in plant biology. *Nat. Acad. Sci. U.S. of America, Proc.*, 91 : 11-17.
- Emsiee, J. 1988. Sodium polytungstate. A non-toxic high density agent for heavy liquid flotation. *The Phytolitharien Newsletter*, 5 (2) : 7-8.
- Esau, K. 1965. *Plant anatomy*. 2nd Ed. London, J. Wiley and Sons.
- Esau, K. 1977. *Anatomy of Seed Plants*. 2nd Ed., John Wiley and Sons, New York, 550 p.

F

- Feindt, F. 1994. Opalphytolithe in vegetabilisch gemagerter Keramik. En: 7000 Jahre bauerliche Landschaft: Entstehung, Erforschung, Erhaltung, Archaeo-Physika 13 : 207-220.
- Figueredo, R.C.L. & W. Handro. 1971. Corpos silicosos da gramineas dos Cerrados V. En: Blocker, E. (ed.), "IV Simposio sobre o Cerrado" : 215-230.
- Filho, L.X. 1974. Observação sobre ocorrência de fitólitos em líquenes. *Univ. Fed. Pernambuco, Mem. Inst. Biociencias*, 1 (1) : 377-388.
- Fisher, R.F.; Newell L.C. & W.F. Fisher. 1995. Opal phytoliths as an indicator of the floristics of prehistoric grasslands. *Geoderma*, 68 (4) : 243-255.
- Fisher, W.F. 1987. Contextual archaeology at the Kirk Street agents house sites. Part IV: Report on the analysis of opal phytoliths from excavations at the Kirk Street agent's house, Lowell, Massachusetts. En: *Interdisciplinary investigations of the Boott Mills, Lowell, Massachusetts. II: The Kirk Street agent's house*. North Atlantic Regional Office, National Park Service, N° 19.
- Fisher, W.F. & G.K. Kelso. 1987. The use of opal phytolith analysis in a comprehensive environmental study: An example from 19th century Lowell, Massachusetts. *Northeast Historical Archaeology*, 16 : 30-48.
- Flores, E.M.; Espinoza, A.M. & Y Kosuka. 1977. Observaciones sobre la epidermis foliar de Zea mays L. al microscopio electrónico de rastreo. *Revista de Biología Tropical*, 25 (1) : 123-135.
- Fölster, H. & G. Las Salas. 1976. Litterfall and mineralization in tropical evergreen forests. *Acta Scientifica Venezuelana*, 27 : 196-202.
- Folger, D.W. 1970. Wind transport of land-derived mineral, biogenic and industrial matter over North Atlantic. *Deep Sea Research*, 17 : 337-352.
- Folger, D.W.; Burckle, L.H. & B.C. Heeze. 1967. Opal phytoliths in a North Atlantic dust fall. *Science*, 155 (3767) : 1243-1244.
- Folk, R.L. & G.K. Hoops. 1982. An early Iron-age layer of glass made from plants at Tel Yin'am, Israel. *Journal of Field Archaeology*, 9 (4) : 455-466.
- Fonseca de Angelo, S. 1984. Identificación de los cuerpos silicosos de las gramineas de la sabana de Trachypogon de los Llanos Altos Centrales. *Bol. Soc. Venez. Cien. Nat.*, 141.
- Fontana, J.P. 1954. Studies on the deposition of silica on the leaves of the grass Panicum maximum. *Revista Brasileira de Biologia*, 14 (1) : 35-40.
- Fontana, R. & H. Muth. 1957. Estructuras silicosas na graminea 'Panicum maximum'. *Mem. Inst. Oswaldo Cruz*, 55 (1).
- Formanek, J. 1899. Über die Erkennung der in den Nahrungs und Futtermitteln vorkommenden Spelzen. *Zeitschrift für Untersuchung der Nahrungs und Genussmittel, sowie der Gebrauchsgegenstände*, 11 : 833-842.
- Fox, R.L.; Silva, J.A.; Plucknett, D.L. & D.Y. Teranishi. 1969. Soluble and total silicon in sugar cane. *Plant and Soil*, 30 (1) : 81-92.
- Fox, R.L.; Silva, J.A.; Younge, O.R.; Plucknett, D.L. & G.D. Sherman. 1967. Soil and plant silicon and silicate response by sugar cane. *Soil Sci. Soc. of Amer., Proc.*, 31 : 775-779.
- Francheschi, V.R. & H.T. Horner Jr. 1980. Calcium oxalate crystals in plants. *Bot. Rev.*, 46 (4) : 361-425.
- Franks, P.C. & A. Swineford. 1959. Character and genesis of massive opal kimball member, Ogalla Formation, Scott County, Kansas. *Jour. Sed. Pedol.*, 29 (2) : 186-196.
- Fredlund, G.G. 1986 a. Problems in the simultaneous extraction of pollen and phytoliths from clastic sediments. En: Rovner, I. (ed.): "Plant Opal Phytolith Analysis in Archaeology and Paleoecology". Proceedings of the 1984 Phytolith Research Workshop, Occasional Papers N° 1 of The Phytolitharien :102-111, Raleigh, North Carolina State University.
- Fredlund, G.G. 1986 b. A 620,000 year opal phytolith record from central Nebraskan loess. En: Rovner, I. (ed.), "Plant Opal Phytolith Analysis in Archaeology and Paleoecology." Occasional Papers N°1 of The Phytolitharien : 12-23, Raleigh, North Carolina State University.
- Fredlund, G.G. 1993. Paleoenvironmental interpretations of stable carbon, hydrogen, and oxygen isotopes from opal phytoliths, Eustis Ash Pit, Nebraska. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 37-46, University of Pennsylvania, Philadelphia.
- Fredlund, G.G. 1995. Bison teeth, phytolith and climate changes in the Great Plains. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 9 (1) : 6.

- Fredlund, G.G. 1998. Reconstructing Late Quaternary paleoenvironments of the Great Plains grasslands of North America. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 24.
- Fredlund, G.G. & P.J. Jaumann. 1987. Late Quaternary palynological and paleobotanical records from the Central Great Plains. En: Johnson, W.C. (ed.), "Quaternary Environments of Kansas." Guidebook Ser., 5. Kans. Geol. Ser., Kans. Geol. Surv., Lawrence, KS, : 167-178.
- Fredlund, G.G. & L.L. Tieszen. 1994. Modern phytolith assemblages from the North American Great Plains. *Journal of Biogeography*, 21 : 321-335.
- Fredlund, G.G. & L.L. Tieszen. 1997 a. Calibrating grass phytolith assemblages in climatic terms: Application to late Pleistocene assemblages from Kansas and Nebraska. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 136 : 199-211.
- Fredlund, G.G. & L.L. Tieszen. 1997 b. Phytolith and carbon evidence for Late Quaternary vegetation and climate change in the southern Black Hills, South Dakota. *Quaternary Research*, 47 : 206-217.
- Fredlund, G.G.; Johnson, W.C. & W. Dort Jr. 1985. A preliminary analysis of opal phytoliths from the Eustis Ash Pit, Frontier County, Nebraska. *Institute for Tertiary-Quaternary Studies, TERQUA Symposium Series* 1: 147- 162.
- Frenguelli, J. 1920. Contribución al conocimiento de la geología de Entre Ríos. *Bol. Acad. Nac. Cs. Córdoba*, 24 : 55-256.
- Frenguelli, J. 1925. Loess y limos pampeanos. *Gaea, An. Soc. Arg. Est. Geogr.*, 1 : 1-80.
- Frenguelli, J. 1930. Partículas de sílice organizada en el loess y en los limos pampeanos. Células silicificadas de Gramíneas. *An. Soc. Cient., Santa Fé*, 2 : 65-109.
- Frey-Wyssling, A. 1930 a. Über die Ausscheidung der Kieselsäure in der Pflanze. *Berichte der Deutschen Botanischen Gesellschaft*, 48 : 179-183.
- Frey-Wyssling, A. 1930 b. Vergleich zwischen der Ausscheidung von Kieselsäure und Kalziumsalzen in der Pflanze. *Berichte der Deutschen Botanischen Gesellschaft*, 48 : 184-191.
- Frey-Wyssling, A. 1935. *Die Stoffausscheidung der höheren Pflanzen*. Berlin.
- Frey-Wyssling, A. 1959. *Die pflanzliche Zellwand*. Springer.
- Frey-Wyssling, A. 1986. The plant cell wall ultrastructure and biogenesis of the cell wall. *Handbuch der Pflanzenan.*, 3 (4). Gebrüder Borntraeger, Berlin.
- Frey-Wyssling, A. & K. Mühthaler. 1965. *Ultrastructural plant cytology*. Elsevier Publ. Co, Amsterdam.
- Frison, E. 1942. De la présence de corpuscules siliceux dans les bois tropicaux en general et en particulier dans le bois de *Parinari glabra* Oliv. et du *Dialium kenei* Pierre: Utilisation de ces bois en construction maritime. *Bull. Agric. Congo Belge*, 28 : 91-105.
- Frison, E. 1948. On some typical forms of silica found in plants. *Microscope*, 7: 38-45.
- Fröhlich, F. 1993. La sílice sedimentaria: structure des verres d'origine biologique et quantification de la sílice dans les roches. En: Fröhlich, F. & J. Bertaux (eds.): "Spectroscopie infrarouge et analyse minéralogique quantitative des roches." Méthode et résultats nouveaux, ORSTOM, Bondy, : 59-64.
- Frohnemeyer, M. 1914. Die Entstehung und Ausbildung der Kieselzellen bei Gramineen. *Bibliotheca Botanica*, 21 (86) : 1-41.
- Fujiwara, H. 1976 a. Investigation on the remains of crops in ancient times by plant opal analysis. *Journal of Archaeological Society of Nippon*, 62 (2) : 148-156.
- Fujiwara, H. 1976 b. Fundamental studies in plant opal analysis (I): on the silica bodies of motor cell of rice plants and their near relatives and the method of quantitative analysis. *Archaeology and Natural Science*, 9 : 15-29.
- Fujiwara, H. 1979. Fundamental studies in plant opal analysis (III): Estimation of the yield of rice in ancient paddy fields through quantitative analysis of plant opal. *Archaeology and Natural Science*, 12 : 29-42.
- Fujiwara, H. 1982. Fundamental studies in plant opal analysis (IV): Detection of plant opals contained in pottery walls of the Jomon period in Kumamoto Prefecture. *Archaeology and Natural Science*, 14 : 55-66.
- Fujiwara, H. 1987. Studies on paddy fields of the Yayoi Period by plant opal analysis: Ancient paddy fields at the Megumi sites in Tottori Prefecture and Tareyanagi site in Aomori Prefecture. *Southeast Asian Studies*, 25 (1) : 140-150.
- Fujiwara, H. 1993. Research into the history of rice cultivation using plant opal analysis. En: Pearsall, D.M. & D.R. Piperno (eds.): "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology.", Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 147-159, University of Pennsylvania, Philadelphia.
- Fujiwara, H.; Jones, R. & S. Brockwell. 1985. Plant opals (phytoliths) in Kakadu archaeological sites: A preliminary report. En: Jones, R. (ed.): "Archaeological Research in Kakadu National Park, Australian National Parks and Wildlife." Special Publication 13 : 155-164, Australian National University, Canberra.

G

- Gangopadhyay, S. & S.B. Chattopadhyay. 1975. Total silica and brown spot disease development of rice under varying levels of nitrogen. *Current Science*, 44 (3) : 92-94.
- García Calderón, N.; Galicia Palacios, M.S. & N. Aguilera Herrera. 1996. Silicofitolitos de la zona Chinopera Xochimulco-Tlahuac D.F. (México). 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 12.
- Gascho, G.J. 1977. Silicon status of Florida sugarcane. *Soil and Crop Science Society of Florida, Proceedings*, 36 : 188-191.
- Gautam-Basak, M. & J. Proctor. 1983. Micronutrients, aluminium, silicon, and ash in leaf litterfall from forests in Gunung Mulu National Park, Sarawak. *The Malaysian Forester*, 46 (2) : 224-232.
- Geis, J.W. 1973. Biogenic silica in selected species of deciduous angiosperms. *Soil Science*, 116 (2) : 113-130.
- Geis, J.W. 1978. Biogenic opal in three species of gramineae. *Ann. Bot.*, 42 (181) : 1119-1129.
- Geis, J.W. 1982. Analytical procedure used for silica content determination of leaf material. *The Phytolitharian Newsletter*, 2 (1): 3-4.
- Geis, J.W. 1986. Characteristics of biogenic opaline silica in angiosperm and coniferous trees. *The Phytolitharian Newsletter*, 4 (2) : 3-11.

- Genua, J.M. & C.J. Hillson. 1985. The occurrence, type and location of calcium oxalate crystals in the leaves of fourteen species of Araceae. *Ann. Bot.*, 56 : 351-361.
- Gernar, B. 1935. Some effects of silicic acid in cereals with particular reference to their resistance to mildew. *Z. Pflernähr. Dung. Bodenk.*, 35 : 102-115.
- Gibson, A.C. & K.E. Horak. 1978. Systematic anatomy and phylogeny of Mexican columnar cacti. *Annals of the Missouri Botanical Garden*, 65 (4) : 999-1057.
- Gibson, R.J.H. 1893. On the siliceous deposit in the cortex of certain species of *Selaginella* Spr. *Ann. Bot.*, 7 : 355-367.
- Gill, E.D. 1953. Palaeoecological interpretation of some Victorian fossil diatom floras. *Melbourne National Museum, Victoria, Mem.* 18 : 141-153.
- Gill, E.D. 1967. Stability of biogenetic opal. *Science*, 158 : 810.
- Glen, F.J.; Willian, J.C. & D. Waksfield. 1985. A preliminary analysis of opal phytoliths from the Eustis ash pit, frontier country, Nebraska. *J. TIR-QUA'82 Simp.*, : 147-162.
- Golchin, A.; Oades, J.M.; Skjemstad, J.O. & P. Clarke. 1994. Study of free and occluded particulate organic matter in soils by Solid-state ¹³ C CP/MAS NMR Spectroscopy and Scanning Electron Microscopy. *Aust. J. Soil Sci.*, 32 : 285-309.
- Golyeva, A.A. 1995. Experience in Using Phytolith Analysis in Soil Science. *Pochvovedinye*, 12 : 1498-1503.
- Golyeva, A.A. 1996. Content and distribution of phytoliths in the main types of soils in eastern Europe. 1° *Europ. Meet. on Phytolith Research (Abstarct)*, : 13.
- Golyeva, A.A. 1997. Content and distribution of phytoliths in the main types of soils in eastern Europe. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 15-22; Madrid.
- Golyeva, A.A. 1998. Russian ancient settlement site: result of choice or chance?. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 28.
- Golyeva, A.A. & A.L. Alexandrovsky. 1996. Studies of phytoliths in Moscow cultural layers. 1° *Europ. Meet. on Phytolith Research (Abstarct)*, : 44.
- Golyeva, A.A. & A.L. Alexandrovsky. 1997. Studies of phytoliths in Moscow cultural layers. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 205-210; Madrid.
- Golyeva, A.A. & F.T. Hiebert. 1998. Biomorphic analysis of archaeological deposits from southern Turkmanistan. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 57.
- Golyeva, A.A. & N. Shishlina. 1998. Paleocology of the Bronze Age Eurasian steppe: New perspective based on phytoliths research. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 32.
- Golyeva, A.A.; Alexandrovsky, A.L. & L.K. Tselishcheva. 1995. Phytolithic analysis of Holocene paleosols. *Eurasian Soil Science*, 12 (2) : 46-56.
- Gonggrijp, J.W. 1923. Over paalworm en tegen paalworm bestand hout. *Indische Mercur*, 46 : 351-353, 369-371.
- Gonggrijp, J.W. 1932. Gegevens betreffende een onderzoek naar nederlandsch-indische houtsoorten, welke tegen den paalworm bestand zijn. *Meded. Boschbouw. Proefst.*, 25.
- González, G. & M. Osterieth. 1996. Estudio de silicobolitos en suelos, paleosuelos y sus materiales parentales, Buenos Aires, Argentina. 1° *Europ. Meet. on Phytolith Research (Abstarct)*, : 14.
- Gonzalez, G. & M. Osterieth. 1997. Estudio de silicobolitos en suelos, paleosuelos y sus materiales parentales, Buenos Aires, Argentina. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 83-92; Madrid.
- Gordon-Gray, K.D.; Van Laren, L. & V. Bandu. 1978. Silica deposition in *Rynchospora* species (Cyperaceae). *Elektron-mikroskopievereniging van Suidelike Afrika*, 8 : 83-84.
- Gottwald, H. 1980. "Louro Preto" - found to be the first silicabearing cordia (Cordia glabrata, Boraginaceae). *IAWA, Bull.*, 1 : 55-59.
- Gottwald, H. & N. Parameswaran. 1967. Beiträge zur Anatomie und Systematik der Quinaceae. *Bot. Jb.*, 87 : 361-381.
- Gould, F.W. 1968. *Grass Systematics*. McGraw-Hill, New York.
- Gould, F.W. & R.B. Shaw. 1983. *Grass Systematics*. College Station, Texas; Texas A & M University Press, 397 p.
- Govindarajalu, E. 1968. The systematic anatomy of South Indian Cyperaceae: *Cyperus* L. subgen. *Kyllinga* (Rottb.) Suringar. *Journal of the Linnean Society of London. Botany*, 62 : 41-58.
- Govindarajalu, E. 1975. Systematic anatomy of South Indian Cyperaceae: *Eleocharis* R. Br., *Rynchospora* Vahl and *Scleria* Bergius. *Adansonia*, 14 (4) : 581-632.
- Govindarajalu, E. & S. Thanyakumar. 1977. The vegetative anatomy of *Freycinetia sumatrana* Hemsl. and *F. rigidifolia* Hemsl. along with the comparative study of shoot apex organization in *F. rigidifolia* and *Pandanus tectorius* Soland. *Adansonia*, 17 (1) : 59-76.
- Graustein, W.C.; Cromack, K. & P. Sollins. 1977. Calcium oxalate: occurrence in soils an effect on nutrient and geochemical cycles. *Science*, 198 : 1252-1254.
- Grave P. & L.K. Kealhofer. 1996. Proto-hilltribe environments in Northwestern Thailand. 1° *Europ. Meet. on Phytolith Research (Abstarct)*, : 45.
- Greer, R.T. 1969. Submicron structure of amorphous opal. *Nature*, 224 : 1199-1200.
- Gregory, W. 1855. On the presence of diatomaceae, phytolitharia, and sponge spicules in soils which support vegetation. *Proceedings of the Botanical Society of Edinburgh*, : 69-72.
- Grob, A. 1896. Beiträge zur Anatomie der Epidermis der Gramineenblätter. *Bibliotheca Botanica*, 7 (36) : 1-122.
- Grosse-Brauckmann, E. 1953. Über die Kieselsäureaufnahme von Pflanzen nach Düngung mit kohlenurem Kalk. *Zeitschrift für Pflanzenernährung und Düngung in der Bodenkunde*, 62 (1) : 19-24.
- Grosse-Brauckmann, E. 1979. Zur Mehltaubekämpfung in Gefäßversuchen mittels Kieselsäuredüngung und Fungizidanwendung. *Landwirtschaftliche Forschungen*, 32 : 150-156.
- Grundhöfer, H. 1994. *Einfluß von Silikataufnahme und einlagerung auf den Befall der Rebe mit Echtem Mehltau*. Diss., Fakultät III (Pflanzenproduktion und Landschaftsökologie) der Univ. Hohenheim.

- Gueguen, A.; Cherouvrier, A. & J.C. Lefeuvre. 1975. Essai de détermination du régime alimentaire d'animaux herbivores à l'aide des phytolithes siliceux des Graminées et des Cypéracées. Application à l'étude du régime alimentaire des Orthoptères Acridie. C.R. *Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 281 (13) : 929-932.
- Guentzel, F. 1913. Blattanatomie südwestafrikanischer Grasses. *Engler's Botan. Jahrbücher Beibl.*, 108 : 1-52.
- Guignard, G. 1988. Les phytolithes chez le genre *Dactylis* tétraploïde. *Can. J. Bot.*, 66: 1047-1053.

H

- Haberlandt, G. 1914. *Physiological plant anatomy*. McMillan and Co Ltd., London.
- Hajós, M. 1966. Magyarországi neogén Phytolithariák. *Ann. Rept. Hung. Geol. Inst.*, : 225-240.
- Hall, T.D. 1968. Some aspects of the microprobe analysis of biological specimens. En: Heinrich, K.F.J. (ed.), "Quantitative electron probe microanalysis." Nat. Bureau of Standard Special Publ., Washington DC, 298 p.
- Hall, J.L. & C. Hawes. 1991. *Electron microscopy of plant cells*. Academic Press Ltd., London.
- Hall, T. D. & H.J. Hocking. 1969. The application of microprobe analysis to biology. En: Mollenstedt, E. & K. Gaukler (eds.), "Proc. V Int. Cong. on x-ray optic and microanalysis." Springer-Verlag, Berlin, : 582-591.
- Hanousek, T.F. 1907. *The microscopy of technical products*. J. Wiley and Sons, New York.
- Handreck, K.A. & L.H.P. Jones. 1967. Uptake of monosilicic acid by *Trifolium incarnatum* (L.). *Amer. J. Biol. Sci.*, 20 : 483-485.
- Handreck, K.A. & L.H.P. Jones 1968. Studies of silica in the oat plant. IV. Silica content of plant parts in relation to stage of growth, supply of silica and transpiration. *Plant and Soil*, 29 (3) : 449-459.
- Hanifa, A.M.; Subramanian, T.R. & B.W. Ponnaiya. 1974. Role of silica in resistance to the leaf roller, *Cnaphalocrocis medinalis* Guenee in rice. *Indian Journal of experimental biology*, 12 : 463-465.
- Hansen, D.J.; Dayanandan, P.; Kaufman, P.B. & J.D. Brotherson. 1976. Ecological adaptations of salt marsh grass, *Distichlis spicata* (Gramineae), and environmental factors affecting its growth and distribution. *Amer. J. Bot.*, 63 (5) : 635-650.
- Harbers, L.H.; McNally, L.K. & W.H. Smith. 1981. Digestibility of three grass hays by the horse and scanning electron microscopy of undigested leaf remnants. *Animal Sci. Jour.*, 53 (5) : 1671-1677.
- Harbers, L.H.; Raiten, D.J. & G.M. Paulsen. 1981. The role of plant epidermal silica as a structural inhibitor of rumen microbial digestion in steers. *Nutrition Reports International*, 24 (5) : 1057-1066.
- Harbers, L.H. & M.L. Thouvenelle. 1980. Digestion of corn and sorghum silage observed by scanning electron microscopy. *Animal Sci. Jour.*, 50 (3) : 514-526.
- Hart, D.M. 1988 a. The plant opal content in the vegetation and sediment of a swamp at Oxford Falls, New South Wales, Australia. *Aust. J. Bot.*, 36 (2) : 159-170.
- Hart, D.M. 1988 b. A safe methods for the extraction of plant opal from sediments. *Search*, 19 (5) : 293-294.
- Hart, D.M. 1990. Occurrence of the "Cyperaceae-type" phytolith in Dicotyledons. *Aust. J. Sys. Biol.*, 3 (4) : 745-750.
- Hart, D.M. 1995. Litterfall and decomposition in the Pilliga State Forests, New South Wales, Australia. *Aust. J. Ecol.*, 20 : 19-25.
- Hart, D.M. 1996. Phytoliths and fire in the Sidney Basin, New South Wales, Australia. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 15.
- Hart, D.M. 1997. Phytoliths and fire in the Sidney Basin, New South Wales, Australia. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 101-110, Madrid.
- Hart, D.M. & G.S. Humphreys. 1996. The mobility of phytoliths in soils: pedological considerations. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 16.
- Hart, D.M. & G.S. Humphreys. 1997 a. The mobility of phytoliths in soils: pedological considerations. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 93-100, Madrid.
- Hart, D.M. & G.S. Humphreys. 1997 b. Plant opal phytoliths: An Australian perspective. *Quaternary Australasia*, 15 (1).
- Hartley, R.D. & L.H.P. Jones. 1972. Silicon compounds in xylem exudates of plants. *Journal of Experimental Botanic*, 23 : 637-640.
- Hastert, A.A.; Owensby, C.E. & L.H. Harbers. 1983. Rumen microbial degradation of indiagrass and big bluestem blades. *Anim. Sci. Jour.*, 57 : 1626-1636.
- Hauke, R.L. 1957. The stomatal apparatus of *Equisetum*. *Bulletin of the Torrey Botanical Club*, 84 (3) : 178-181.
- Hauke, R.L. 1978 a. Microreplicas as a technique for rapid evaluation of surface silica micromorphology in *Equisetum*. *Amer. Fern Jour.*, 68 (2) : 37-40.
- Hauke, R.L. 1978 b. A taxonomic monograph of *Equisetum* subgenus *Equisetum*. *Nova Hedwigia*, 30 : 385-455.
- Hauke, R.L. 1979. *Equisetum ramosissimum* in North America. *Amer. Fern Jour.*, 69 (1) : 1-5.
- Hayward, D.M. & D.W. Parry. 1973. Electron-probe microanalysis studies of silica distribution in barley (*Hordeum sativum* L.). *Ann. Bot.*, 37 : 579-591.
- Hayward, D.M. & D.W. Parry. 1975. Scanning electron microscopy of silica deposits in the leaves of barley (*Hordeum sativum* L.). *Ann. Bot.*, 39 : 1003-1009.
- Hayward, D.M. & D.W. Parry. 1980. Scanning electron microscopy of silica deposits in the culms, floral bracts and awns of barley (*Hordeum sativum* Jess.). *Ann. Bot.*, 46 : 541-548.
- Helbaek, H. 1959. How farming began in the Old World. *Archaeology*, 12 : 183-189.
- Helbaek, H. 1960. Cereals and weed grasses in phase A. En: Braidwood, R.J. & L.S. Braidwood (eds.), 'Excavations in the Plain of Antioch I.' University of Chicago, Oriental Institute Publications 61, Appendix II, : 540-543, University of Chicago Press.
- Helbaek, H. 1961. Studying the diet of ancient man. *Archaeology*, 14 : 95-101.
- Helbaek, H. 1969. Paleoethnobotany. En: Brothwell, D. & E. Higgs (eds.), "Science in Archaeology." New York Basic Books.
- Hercus, B.H. 1960. Plant cuticle as an aid to determine the diet of grazing animals. *Proc. 8th Int. Grassland Congr.*, IB : 443-447.

- Herendeen, P. 1985. History of the alvar vegetation of Drummond Island, Michigan. *2nd Phytolith Conference (Abstracts), Duluth, The Phytolitharian Newsletter*, 3 (3) : 7-8.
- Herrera, C.M. 1985. Grass/grazer radiations: An interpretation of silica body diversity. *Oikos*, 45 : 446-447.
- Hillis, W.E. & D. de Silva. 1979. Inorganic extraneous constituents of wood. *Holzforschung*, 33 : 47-53.
- Hirata, T.; Saiki, H. & H. Harada. 1972. Observations on crystals and silica inclusions in parenchyma cells of certain tropical woods by scanning electron microscope. *Bulletin Kyoto University*, 44 : 194-205.
- Hjelmqvist, H. 1990. Über die Zusammensetzung einiger prähistorischer Brote. *Fornvännen, Tidskr. Svensk Antikvar. Forsk.*, 85 : 9-21.
- Hodson, M.J. 1985. An ultrastructural study on the developmental phases and silicification of the glumes of *Phalaris canariensis* L. *Ann. Bot.*, 55 : 649-665.
- Hodson, M.J. 1986. Silicon deposition in the roots, culm and leaf of *Phalaris canariensis* L. *Ann. Bot.*, 58 : 167-177.
- Hodson, M.J. & A. Bell. 1986. The mineral relation of the lemma of *Phalaris canariensis* L. with particular reference to its silicified macrohairs. *Israel J. Bot.*, 35 : 241-253.
- Hodson, M.J. & D.W. Parry. 1982. The ultrastructure and analytical microscopy of silicon deposition in the aleurone layer of the caryopsis of *Setaria italica* (L.) Beauv. *Ann. Bot.*, 50 (2) : 221-228.
- Hodson, M.J. & A.D. Sangster. 1987. Recent progress in botanical research on phytoliths. *The Phytolitharian Newsletter*, 5 (1) : 5-11.
- Hodson, M.J. & A.D. Sangster. 1988 a. Silica deposition in the inflorescence bracts of wheat (*Triticum aestivum*). I. Scanning electron microscopy and light microscopy. *Can. J. Bot.*, 66 : 829-838.
- Hodson, M.J. & A. D. Sangster. 1988 b. Observations of the distribution of mineral elements in the leaf of wheat (*Triticum aestivum*) with particular reference to silicon. *Ann. Bot.*, 62 : 463-471.
- Hodson, M.J. & A.D. Sangster. 1989 a. Silica deposition in the inflorescence bracts of wheat (*Triticum aestivum*). II. X-ray microanalysis and backscattered electron imaging. *Can. J. Bot.*, 67 : 281-287.
- Hodson, M.J. & A.D. Sangster. 1989 b. Subcellular localization of mineral deposits in the roots of wheat (*Triticum aestivum* L.). *Protoplasma*, 151 : 19-32.
- Hodson, M.J. & A.D. Sangster. 1989 c. X-ray microanalysis of the seminal root of *Sorghum bicolor* (L.) Moench with particular reference to silicon. *Ann. Bot.*, 64 : 659-667.
- Hodson, M.J. & A.D. Sangster. 1990. Techniques for the microanalysis of higher plants with particular reference to silicon in cryofixed wheat tissues. *Scanning Microscopy*, 4 (2) : 407-418.
- Hodson, M.J.; Sangster, A.D. & D.W. Parry. 1982. Silicon deposition in the inflorescence bristles and macrohairs of *Setaria italica* (L.) Beauv. *Ann. Bot.*, 50 (6) : 843-850.
- Hodson, M.J.; Sangster, A.D. & D.W. Parry. 1984. An ultrastructural study on the development of silicified tissues in the lemma of *Phalaris canariensis* L. *Proc. of the Royal Soc. of London, Series B*, 222 : 413-425.
- Hodson, M.J.; Sangster, A.D. & D.W. Parry. 1985. An ultrastructural study on the development phases and silicification of the glumes of *Phalaris canariensis* L. *Ann. Bot.*, 55 : 649-665.
- Hodson, M.J.; Westerman, J. & H.J. Tubb. 1998. The use of inflorescence phytoliths from the Triticeae in food science. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 40.
- Hodson, M.J.; Williams, S.E. & A.D. Sangster. 1996. Silica deposition in the needles of the gymnosperms. I. Chemical analysis and light microscopy. *1° Europ. Meet. on Phytolith Research (Abstracts)*, : 28.
- Hodson, M.J.; Williams, S.E. & A.D. Sangster. 1997. Silica deposition in the needles of the gymnosperms. I. Chemical analysis and light microscopy. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 123-134, Madrid.
- Hoffman, F.M. & C.J. Hillson. 1979. Effects of silicon on the life cycle of *Equisetum hyemale* L. *Bot. Gaz.*, 140 (2) : 127-132.
- Holm, T. 1899 a. Studies in the Cyperaceae. VIII. On the anatomy of some North American species of *Scleria*. *Amer. J. Sci.*, 7 : 5-12.
- Holm, T. 1899 b. Studies in the Cyperaceae. IX. The genus *Lipocarpus* R. Br. *Amer. J. Sci.*, 7 : 171-183.
- Holm, T. 1899 c. Studies in the Cyperaceae. X. *Fimbristylis* Vahl., an anatomical treatise of North American species. *Amer. J. Sci.*, 7 : 435-450.
- Hope Jahren, A. 1996. How and why do phytoliths form?: Biomineralization. *The Phytolitharian Newsletter*, 9 (3) : 2-10.
- Homer, H.T.; Tiffany, L.H. & A.M. Cody. 1983. Formation of calcium oxalate crystals associated with apothecia of the discomycete *Dasyscypha capitata*. *Mycologia*, 75 (3) : 423-435.
- Hosono, M.; Oba, Y.; Sase, T.; Utsugawa, T. & K. Aoki. 1991. Holocene volcanic ash soils at Waimangu Road tephra section, North Island, New Zealand. *Quaternary Research*, 30 (2) : 91-101.
- Houyuan, L.; Naiquin, W. & L. Baozhu. 1996. Recognition of rice phytoliths. *1° Europ. Meet. on Phytolith Research (Abstracts)*, : 70.
- Houyuan, L.; Naiquin, W. & L. Baozhu. 1997. Recognition of rice phytoliths. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 159-174, Madrid.
- Hryniewicz, B. & W. Kurtz. 1936. La répartition des cones siliceux dans les cellules des Cyperacées et leur corrélation. *Bulletin International de l'Académie Polonaise des Sciences et des Lettres, Series B*, : 33-54.
- Huber, J.K. 1987. Extraction of pal phytoliths from peat samples. *The Phytolitharian Newsletter*, 4 (3) : 35.
- Hummel, K. & K. Staesche. 1962. Die Verbreitung der Haartypen in den natürlichen Verwandtschaftsgruppen. En: Zimmermann, W. & P.G. Ozenda (eds.), *Handbuch der Pflanzenanatomie*. "2. Aufl., Bd. IV, Teil 5, Gebrüder Borntraeger, Berlin.
- Humphreys, G.S. & D.M. Hart. 1998. Phytolith depth trends in soils. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 84.
- Hurd, D.C. 1983. Physical and chemical properties of siliceous skeletons. En: Aston, S.R. (ed.), *Silicon Geochemistry and Biochemistry*. : 187-244. Academic Press, London, New York.
- Hurd, D.C. & K. Takahashi. 1983. The estimation of minimum mechanical loss during an in-situ biogenic silica dissolution experiment. *Marine Micropaleontology*, 7 (5) : 441-447.

- Hurghisiu, I. 1974. Continutul in silice din *Phragmites australis* (Cav.) Trin. et Steud., *Typha angustifolia* L. si *Scirpus lacustris* L. crescute in conditii ecologice variate. *Celuloza Si Hirtie*, 23 : 10-11.
- Hutton, J.T. & K. Norrish. 1974. Silicon content of wheat husks in relation to water transpired. *Aust. J. Agr. Res.*, 25 : 203-212.

I

- IAWA, Committee. 1989. IAWA List of Microscopic Features for Hardwood Identification. *IAWA Bull. n.s.* 10 (3) : 219-332.
- Idris, M.; Hossain, M. & F.A. Choudhury. 1975. The effect of silicon on lodging of rice in presence of added nitrogen. *Plant and Soil*, 43 (3) : 691-695.
- Ikeya, M. & J. Golson. 1985. ESR dating of phytoliths (plant opal) in sediments: a preliminary study. En: Ikeya, M. & T. Miki (eds.). "ESR Dating and Dosimetry", IONICS, : 281-285, Tokyo.
- Iler, R.K. 1954. *The colloid chemistry of silica and the silicates*. Cornell Univ. Press, Ithaca, New York.
- Iler, R.K. 1977. Hydrogen-bonded complexes of silica with organic compounds. En: Bendz, G. & I. Lindquist (eds.), "Biochemistry of Silicon and Related Problems." : 53-76. Plenum Press, New York.
- Iler, R.K. 1979. *The chemistry of silica: Solubility, Polymerization, colloid and surface properties and biochemistry*. Wiley & Sons, New York, 886p.
- Imazumi, K. & S. Yoshida. 1958. Edaphological studies on silicon supplying power of paddy fields. *Bull. Nat. Inst. Agr. Sci. (Japan) B*, 8 : 261-304.
- Islam, A. & R.C. Saha. 1969. Effects of silicon on the chemical composition of rice plants. *Plant and Soil*, 30 (3) : 446-458.

J

- Jackson, M.L. 1956. Soil chemical analysis. Advanced course. *Dep. of Soils. Sci., Univ. Wisconsin*. 991 p.
- Jahren, H.A. 1996. How and why do phytoliths form?: Biomineralization. *The Phytolitharien Newsletter*, 9 (3) : 2-10.
- Jahren, H.A. & R.G. Amundson. 1995. Determining climate from Hackberry phytoliths. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 9 (1) : 6.
- Jahren, H.A.; Toth, N.; Shick, K.; Clark, J.D. & R.G. Amundson. 1994. Phytolith and other residues on stone tool surface: Experimental results. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 8 (2) : 5.
- Jakes, K.A. & J.C. Mitchell. 1996. Cold plasma ashing preparation of plant phytoliths and their examination with scanning electron microscopy and energy dispersive analysis of X-rays. *J. Archaeol. Sci.*, 23 : 149-156.
- Jarvis, S.C. 1987. The uptake and transport of silicon by perennial ryegrass and wheat. *Plant and Soil*, 97 : 429-437.
- Jefferies, T.A. 1916. The vegetative anatomy of *Molinia caerulea*, the purple heath grass. *The New Phytologist*, 15 : 49-71.
- Jeffords, R.M. & D.H. Jones. 1959. Preparation of slides for spores and other microfossils. *Jour. Paleont.*, 33 (2) : 344-347.
- Jendzejewski, J.P. & G.F. Hart. 1978. Distribution of siliceous microfossils in surficial bottom sediments of the Gulf of Mexico. *Palynology*, 2 : 159-166.
- Jiang, Q. 1993. Phytolith research at Beijing University. *The Phytolitharien Newsletter*, 8 (1) : 3.
- Jiang, Q. 1994. Phytolith analysis and the origin of rice agriculture research in China. *The Phytolitharien Newsletter*, 8 (3) : 67.
- Jiang, Q. 1995. Searching for evidence of early rice agriculture at prehistoric sites in China through phytolith analysis: An example from central China. *Review of Palaeobotany and Palynology*, 89 : 481-485.
- Jiang, Q. 1996. Phytolith evidence for early cultivation at Baligan site of Dengzhou, Henan province, Central China. 1° *Europ. Meet. on Phytolith Research, (Abstracts)*, : 46.
- Jiang, Q. 1997. Phytolith assemblages and the implications from archaeological soils of Yinyang site, Dengfeng County, Henan Province. *Chinese Science Bulletin*, 42 (1).
- Jiang, Q. & D. Piperno. 1994. Phytolith analysis of an archaeological site (Longshan Culture Period) in Zhumadian City, Henan Province, China: Paleoenvironmental and cultural implications. *Geoarchaeology*, 9 (5) : 409-417.
- Jiang Q. & A.J. Zhang. 1998. Phytolith evidence of rice agriculture in Baligan site of Dengzhou city, Henan Province. *Natural Science Bulletin of Peking University*, 34 (1) : 66-71.
- Jiang, Q.; Song, Y. & Y. Li. 1996. Phytolith analysis of an archaeological site in Zhumadian city of Henan Province. *Archaeology*, 4 : 87-91.
- Johnson, T.C. 1976. Biogenic opal preservation in pelagic sediments of a small area in the eastern tropical Pacific. *Amer. Geol. Soc., Bull.*, 87 : 1273-1282.
- Johnson, L.A.S. & B.G. Briggs. 1975. On the Proteaceae, the evolution and classification of a southern family. *Bot. J. Linn. Soc.* 70 : 83-182.
- Johnston, A.; Bezeau, L.M. & S. Smoliak. 1967. Variation in silica content of range grasses. *Can. J. Plant Sci.*, 47 (1) : 65-71.
- Jones, J.B. & E.R. Segnit. 1971. The nature of opal. I. Nomenclature and constituent phases. *Geol. Soc. Aust. Jour.*, 18 : 57-68.
- Jones, J.D.; Kaufman, P.B. & W.L. Rigot. 1979. Method for determination of silicon in plant materials by neutron activation analysis. *Journal of Radioanalytical Chemistry*, 50 (1-2) : 261-275.
- Jones, J.G. 1988. A simplified procedure for the extraction of silica and calcium oxalate phytoliths from plant tissue. *The Phytolitharien Newsletter*, 5 (3) : 910.
- Jones, J.G. 1989. The extraction and analysis of calcium oxalate phytoliths from archaeological sediments and coprolites. *Archaeobotany through phytolith analysis symposium, Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharien Newsletter*, 6 (1) : 5.
- Jones, J.G. 1993 a. Analysis of pollen and phytoliths in residue from a colonial period ceramic vessel. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 31-35, University of Pennsylvania, Philadelphia.
- Jones, J.G. 1993 b. The use of plant microfossil analysis in the identification of coin hoard origin. *The Phytolitharien Newsletter*, 8 (1) : 3-5.

- Jones, J.G. & V.M. Bryant, Jr. 1992. Phytolith taxonomy in selected species of Texas Cacti. En: Rapp, G. Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." Advances in Archaeological and Museum Science, 1: 215-238.
- Jones, L.H.P. & K.A. Handreck. 1963. Effects of iron and aluminium oxides on silica in solution in soils. *Nature*, 198 (4883) : 852-853.
- Jones, L.H.P. & K.A. Handreck. 1965. Studies of silica in the oat plant, III. Uptake of silica from soils by the plant. *Plant and Soil*, 23 (1) : 79-96.
- Jones, L.H.P. & K.A. Handreck. 1967. Silica in soils, plants and animals. *Advances in Agronomy*, 19 : 107-149.
- Jones, L.H.P. & K.A. Handreck. 1969. Uptake of silica by *Trifolium incarnatum* in relation to the concentration in the external solution and to transpiration. *Plant and Soil*, 30 (1) : 71-80.
- Jones, L.H.P. & A.A. Milne. 1963. Studies of silica in the oat plant I. Chemical and physical properties of the silica. *Plant and Soil*, 18 (2) : 207-220.
- Jones, L.H.P.; Milne, A.A. & J.V. Sanders. 1966. Tabashir: An opal of plant origin. *Science*, 151 : 464-466.
- Jones, L.H.P.; Milne, A.A. & S.M. Wadham. 1963. Studies of silica in the oat plant II. Distribution of the silica in the plant. *Plant and Soil*, 18 (3) : 358-371.
- Jones, R.L. 1964. Note on occurrence of opal phytoliths in some Cenozoic sedimentary rocks. *Jour. Paleont.*, 38 : 773-775.
- Jones, R.L. 1969. Determination of opal in soil by alkali dissolution analysis. *Amer. Soil Sci. Soc., Proc.*, 33 (6) : 976-977.
- Jones, R.L. & A.H. Beavers. 1963 a. Some mineralogical and chemical properties of plant opal. *Soil Science*, 96 (6) : 375-379.
- Jones, R.L. & A.H. Beavers. 1963 b. Sponge spicules in Illinois soils. *Amer. Soil Sci. Soc., Proc.*, 27 (4) : 438-440.
- Jones, R.L. & A.H. Beavers. 1964 a. Aspects of catenary and depth distribution of opal phytoliths in Illinois soils. *Soil Sci. Soc. Amer., Proc.*, 28 (5) : 413-416.
- Jones, R.L. & A.H. Beavers. 1964 b. Variation of opal phytolith content among some great soil groups in Illinois. *Soil Sci. Soc. Amer., Proc.*, 28 (5) : 711-712.
- Jones, R.L. & W.W. Hay. 1975. Bioliths. En: Giesking, J.E. (ed.), "Soil Components." Cap. 14 : 481-496, Springer-Verlag, New York.
- Jones, R.L.; Hay, W.W. & A.H. Beavers. 1963. Microfossils in Wisconsin loess and till from western Illinois and eastern Iowa. *Science*, 140 (3572) : 1222-1224.
- Jones, R.L.; McKenzie, L.J. & A.H. Beavers. 1964. Opaline microfossils in some Michigan soils. *The Ohio Journal of Science*, 64 (6) : 417-423.
- Juan-Tresserras, J. 1996. Fitolitos y arqueología, consideraciones a las investigaciones realizadas en la Península Ibérica. 1° *Europ. Meet. on Phytolith Research, (Abstracts)*, : 47.
- Juan-Tresserras, J. 1998. Food and drug residues in human tooth: phytolith contribution to diet and health investigations. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 38.
- Juan-Tresserras, J.; Lalueza, C.; Albert, R.M. & M. Calvo. 1996. Identification of phytoliths from prehistoric human dental remains from the Iberian Peninsula and the Balearic Islands. 1° *Europ. Meet. on Phytolith Research, (Abstracts)*, : 48.
- Juan-Tresserras, J.; Lalueza, C.; Albert, R.M. & M. Calvo. 1997. Identification of phytoliths from prehistoric human dental remains from the Iberian Peninsula and the Balearic Islands. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 197-204, Madrid.
- Juan-Tresserras, J.; Medina, V.; Serrallonga, J.; Fernandez, V.; Jimeno, A. & M. Menendez. 1996. Aportaciones a la conducta trófica e instrumental de los grupos cazadores-recolectores: Análisis de fitolitos y almidones en material lítico (experimental y arqueológico) para el procesamiento de vegetales. 1° *Europ. Meet. on Phytolith Research, (Abstracts)*, : 49.

K

- Kajale, M. & S.P. Eksamberkar. 1996. Application of phytolith analyses to a neolithic site at Budihal, district Gulbarga, South India. 1° *Europ. Meet. on Phytolith Research, (Abstracts)*, : 51.
- Kajale, M. & S.P. Eksamberkar. 1997. Application of phytolith analyses to a neolithic site at Budihal, district Gulbarga, South India. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 219-229, Madrid.
- Kajale, M. & S.P. Eksamberkar. 1998 a. Phytolitharian approach for understanding stratigraphy and activity during early historic occupation at Balathal, Rajasthan, India. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 52.
- Kajale, M. & S.P. Eksamberkar. 1998 b. On the occurrence of phytoliths from earliest ash deposit left by protohistoric farmers at Balathal (3rd Millenium BC) District Udaipur, Rajasthan, India. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 58.
- Kajale, M.D.; Mulholland, S. & G. Rapp Jr. 1995. Applications of phytolith analysis: a potential tool for quaternary environmental and archaeological investigations in the Indian Subcontinent. *Memoirs Geological Society of India*, 32 : 530-544.
- Kalisz, P.J. & S.E. Boettcher. 1990. Phytolith analysis of soils at Buffalo Beats, a small forest opening in southeastern Ohio. *Bull. Torrey Bot. Club*, 117 (4) : 445-449.
- Kam, Y.K. & B.C. Stone. 1970. Morphological studies in Pandanaceae. IV. Stomate structure in some Mascarene and Madagascar *Pandanus* and its meaning for infrageneric taxonomy. *Adansonia*, 10 (2) : 219-246.
- Kamanina, I.Z. 1996 a. Accumulation of phytoliths in southern taiga soils of different age. 1° *Europ. Meet. on Phytolith Research, (Abstracts)*, : 17.
- Kamanina, I.Z. 1996 b. Phytoliths data analysis of soils of different landscape zones. 1° *Europ. Meet. on Phytolith Research, (Abstracts)*, : 18.
- Kamanina, I.Z. 1997 a. Phytoliths data analysis of soils of different landscape zones. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 23-32, Madrid.
- Kamanina, I.Z. 1997 b. Accumulation of phytoliths in southern taiga soils of different age. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 45-48, Madrid.
- Kamanina, I.Z. & S.A. Shoba. 1996. The phytoliths analysis applied to soils of complex formation and paleosoils. 1° *Europ. Meet. on Phytolith Research, (Abstracts)*, : 19.

- Kamanina, I.Z. & S.A. Shoba. 1997. The phytoliths analysis applied to soils of complex formation and paleosoils. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 33-44; Madrid.
- Kanno, I. & S. Arimura. 1958. Plant opal in Japanese soils. *Soil and Plant Food*, 4 (2) : 62-67.
- Kaphahan, S. 1904. Beiträge zur Anatomie der Rhynchosporienblätter und zur Kenntnis der Verkeiselungen. Heidelberg.
- Kaplan, L. 1985. Phytolith studies of archaeological sediments from the Peruvian Andes, 3800 meters above sea level. 2nd Phytolith Conference (Abstracts), Duluth, The Phytolitharian Newsletter, 3 (3) : 9.
- Kaplan, L. 1989 a. Phytolith analysis at Wadi Kubbanayah (Egypt). En: Wensdorf, F. & R. Schild (eds.): "The Prehistory of Wadi Kubbanayah, 2. Stratigraphy, Paleoecology and Environment." Southern Methodist University Press, : 267- 269, Dallas.
- Kaplan, L. 1989 b. Cereal grain phytoliths of the Near East. *Archaeobotany through phytolith analysis symposium, Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharian Newsletter*, 6 (1) : 4.
- Kaplan, L.; Smith, M.B. & L.A. Sneddon. 1992. Cereal grain phytoliths of Southwest Asia and Europe. En: Rapp, G. Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." Advances in Archaeological and Museum Science, 1: 149-174.
- Karlstrom, P. 1978. Epidermal leaf structures in species of Strobilantheae and Petalidieae (Acanthaceae). *Botaniska Notiser*, 131 : 423-433.
- Karlstrom, P. 1980. Epidermal leaf structures in species of Asystasieae, Pseuderantheae, Graptophylleae and Odontonemeae (Acanthaceae). *Botaniska Notiser*, 133 : 1-16.
- Kato, Y. 1960. A preliminary note on phytogenic particles in Koroboku soils. *J. Soil and Plant Food*, 30 : 549-552.
- Kato, Y. 1963. Siliceous phytogenic particles in volcanic ash. *Dai-yon Ki Kenyu (The Quaternary Research)*, 3 : 59-66.
- Kato, Y.; Sase, T.; Sakai, S. & N. Kanazawa. 1986 a. Age estimation of the buried humic soils in volcanic ash profile from plant opals. I. Estimation from annual accumulation rate of the plant opals. *Dai-yon Ki Kenyu (The Quaternary Research)*, 25 (2) : 99-104.
- Kato, Y.; Sase, T.; Sakai, S. & N. Kanazawa. 1986 b. Age estimation of the buried humic soils in volcanic ash profile from plant opals. II. Estimation from degree of corrosion on the surface of plant opal. *Dai-yon Ki Kenyu (The Quaternary Research)*, 25 (2) : 105-111.
- Kaufman, P.B. 1981. Effect of gibberelic acid on silica content and distribution in sugarcane. *Plant Physiology*, 68 : 314-317.
- Kaufman, P.B. & S.J. Cassell. 1963. Striking features in the development of internodal epidermis in the oat plant (*Avena sativa*). *The Michigan Botanist*, 2 : 115-121.
- Kaufman, P.B.; Petering, L.B. & J.G. Smith. 1970. Ultrastructural development of silicacork cell pairs in *Avena* internodal epidermis. *Bot. Gaz.*, 131(3) : 173-185.
- Kaufman, P.B.; Petering, L.B. & S.L. Soni. 1970. Ultrastructural studies on cellular differentiation in internodal epidermis of *Avena sativa*. *Phytomorphology*, 20 : 281-309.
- Kaufman, P.B.; Bigelow, W.C.; Petering, L.B. & F.B. Drogosz. 1969. Silica in developing epidermis cells of *Avena* internodes: Electron microprobe analysis. *Science*, 166 : 1015-1017.
- Kaufman, P.B.; Takeoka, Y. & A. Matsumura. 1982. Study on the silica body formation of bulliform cells of leaf lamina in grass (Poaceae). I. Development of a detecting method for silica body through SOTEX-IMAGE analysis method. *Crop Sci. Soc. Japan Annual Meeting*, 51 : 1-2.
- Kaufman, P.B.; Bigelow, W.C.; Schmid, R. & N.S. Ghosheh. 1971. Electron microprobe of silica in epidermal cells of *Equisetum*. *Amer. J. Bot.*, 58 (4) : 309-316.
- Kaufman, P.B.; Dayanandan, P.; Franklin, C.I. & Y. Takeoka. 1985. Structure and function of silica bodies in the epidermal system of grass shoots. *Ann. Bot.*, 55 : 487-507.
- Kaufman, P.B.; Soni, S.L.; Bigelow, W.C. & N.S. Ghosheh. 1973. Scanning electron microscopic analysis of the leaf and internodal epidermis of the rice plant (*Oryza sativa*). *Phytomorphology*, 23 : 52-58.
- Kaufman, P.B.; LaCroix, J.D.; Rosen, J.J.; Allard, L.F. & W.C. Bigelow. 1972. Scanning electron microscopy and electron microprobe analysis of silicification patterns in inflorescence bracts of *Avena sativa*. *Amer. J. Bot.*, 59 (10) : 1018-1025.
- Kaufman, P.B.; Soni, S.L.; LaCroix, J.D.; Rosen, J.J. & W.C. Bigelow. 1972. Electron-probe microanalysis of silicon in the epidermis of rice (*Oryza sativa* L.) internodes. *Plant*, 104 : 10-17.
- Kaufman, P.B.; Takeoka, Y.; Bigelow, W.C.; Schmid, R. & N.S. Ghosheh. 1971. Electron microprobe analysis of silica in epidermal cells of *Equisetum*. *Amer. J. Bot.*, 58 (4) : 309-316.
- Kaufman, P.B.; Dayanandan, P.; Takeoka, Y.; Bigelow, W.C.; Jones, J.D. & R. Iler. 1981. Silica in shoots of higher plants. En: Simpson, T.L. & B.E. Volcani (eds.), "Silicon and Siliceous Structures in Biological Systems." Cap. 15: 409-449, Springer, New York, Heidelberg, Berlin.
- Kaufman, P.B.; LaCroix, J.D.; Dayanandan, P.; Allard, L.F.; Rosen, J.J. & W.C. Bigelow. 1973. Silicification of developing internodes in the perennial scouring rush (*Equisetum hyemale* var. *affine*). *Developmental Biology*, 31 : 124-135.
- Kaufman, P.B.; Takeoka, Y.; Carlson, T.J.; Bigelow, W.C.; Jones, J.D.; Moore, P.H. & N.S. Ghosheh. 1979. Studies on silica deposition in sugarcane (*Saccharum* spp.) using scanning electron microscopy, energy-dispersive x-ray analysis, neutron activation analysis, and light microscopy. *Phytomorphology*, 29 (2) : 185-193.
- Kaufman, P.B.; Dayanandan, P.; Goldoftas, M.; Lau, E.; Srinivasan, J.; Clark, J.M.; Hollingsworth, P.; Mardinly, J. & W.C. Bigelow. 1978. Analysis of primary deposition sites for silica (SiO₂·nH₂O) in panicoid and festucoid grasses and in scouring rushes (*Equisetum*) by scanning electron microscopy and energy-dispersive microanalysis. *Microbeam Analysis Society Proceedings 13th Conference. Ann Arbor, Michigan*, : 82A-82C.
- Kealhofer, L. 1989. Phytoliths in Southeast Asian flora. 58th Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharian Newsletter, 7 (3) : 6.
- Kealhofer, L. 1994. Phytoliths and paleoecology of Central Thailand. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 8 (2) : 5.
- Kealhofer, I. & D.R. Piperno. 1996. Two phytolith sequences from the Bang Pakong valley. En: Thompson, G.B. (ed.), "The Excavation of Khok Phanom Di, A Prehistoric Site in Central Thailand." Vol. IV, Subsistence and Environment: The Botanical Evidence. The Biological Remains. Part II. Society of Antiquaries. : 227-238, London.

- Kellogg, E.A. & C.S. Campbell. 1987. Phylogenetic analyses of the Gramineae. En: Soderstrom, T.R.; Hilu, K.W.; Campbell, C.S. & M.E. Barkworth (eds.), "Grass Systematics and Evolution." Smithsonian Institution Press. : 310-322, Washington D.C.
- Kelly, E.F. & C. Yonker. 1993. Stable carbon isotope composition of paleosols: an application to Holocene. *Geophysical Monograph*, 78 : 233-239.
- Kelly, E.F.; Amundson, R.G.; Marino, B.O. & M.J. DeNiro. 1991. Stable isotope ratios of carbon in phytoliths as a quantitative method of monitoring vegetation and climate change. *Quaternary Research*, 35 (2) : 222-233.
- Kelly, E.F.; Amundson, R.G.; Marino, B.O. & M.J. DeNiro. 1991. Environmental and geological influences on the Stable Carbon Isotopic composition of carbonate in Holocene grassland soils. *Soil Sci. Amer. J.*, 55 : 1651-1658.
- Kelly, E.F.; Chadwick, O.A.; Terry, J.D.; Brzezinski, M.A. & M. DeNiro. 1998. Biogeochemistry of silica in soil-vegetation systems: theory, methods and applications for quantifying the role of plants in terrestrial weathering. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 76-77.
- Khangarot, A.S. & L.P. Wilding. 1973. Biogenic opal in Wisconsin and Illinois age terraces in West-Central Ohio. *Jour. of the Indian Society of Soil Science*, 21 (4) : 505-508.
- Kido, M. & S. Yanatori. 1960. Physiological and ecological studies of rice plant in well-drained and ill-drained fields. 6. Changes of some constituents in root of rice plant. *Japanese Crop. Sci. Soc., Proc.*, 29 : 40-42.
- Kido, M. & S. Yanatori. 1963. Physiological and ecological studies of the rice plant in well-drained and ill-drained fields. 8. Distribution of silicified tissues of rice culm and silicate content in each internode as affected by different cultural conditions. *Japanese Crop. Sci. Soc., Proc.*, 31 : 237-240.
- Kido, M. & S. Yanatori. 1964. Studies on silicified tissues of leaf in rice plant by spodogram - hydrogen chloride treatment method. *Japanese Crop. Sci. Soc., Proc.*, 33 : 115-118.
- Kim, K. & S.S. Whang. 1992. Nature of phytolith and their applications in botany. *Sikmul Hakhoe Chi*, 35 (3) : 283-305.
- King, E.J. & R. Stantial. 1933. The biochemistry of silicic acid. I. Microdetermination of silica. *Biochem. Jour.*, 27 (2) : 990-1001.
- King, E.J.; Stacy, B.D.; Holt, P.F.; Yates, D.M. & D. Pickles. 1955. The colorimetric determination of silicon in the microanalysis of biological material and mineral dust. *Analyst. Land*, 80 : 441-453.
- Kiseleva, N.K. 1992. Botanical and phytolith analysis of Holocene zoogenic deposits in North Osetia. En: Dinesman, L.G. (ed.), "Historical Ecology of Wild and Domestic Ungulates: History of Pasture Ecosystems (Istoricheskaya Ekologiya Dikikh Kopytnykh).", Nauka, : 24-83, Moskau.
- Kiseleva, N.K. 1982. Phytolith soil studies as a tool for the investigation of the history of East Mongolia steppes. *Izvestiya A.N. SSSR (News of Soviet Academy of Science), ser. Geograf.*, 2 : 95-106.
- Klamm, M. 1991. Die Erforschung von Opal-Phytolithen aus dem Kurgan Certomlyk. En: Alekseej, A.J.; Mursin, W.J. & R. Rolle (eds.), *Ein Königskurgan des 4. Jh. v.d.Z.*, Kiev.
- Klamm, M. & H. Viebrock. 1985. Bodenkundliche Untersuchungen zur Herkunftsbeziehung des Baumaterials des skythischen Kurgans Certomlyk in der Schwarmeer-Lößbodensteppe bei Nikopol. *Mitteilungen d. Deutschen Bodenkundlichen Gesellschaft*, 43 (2) : 751-756.
- Klamm, M.; Viebrock, H. & B. Meyer. 1991. Bodenkundliche Untersuchungen des skythischen Kurgans Certomlyk. En: Alekseej, A.J.; Mursin, W.J. & R. Rolle (Hrsg.): *Ein Königskurgan des 4. Jh. v.d.Z.*, : 286-306, Kiev.
- Klein, R.L. & J.W. Geis. 1978. Biogenic silica in the Pinaceae. *Soil Science*, 126 (3) : 145-155.
- Kobayashi, M. 1986. Motor cell-silica bodies of *Sasa* and allied genera from Hachijojima, Izu Islands, Japan, with a special reference to the origin of *Sasakuriensis* in the Izu Islands. *Journal of Phytogeography and Taxonomy*, 34 : 31-35.
- Koeppen, R.C. 1967. Revision of *Dicorynia* (Cassieae, Caesalpinaceae). *Brittonia* 19 : 42-61.
- Koeppen, R.C. 1980. Silica bodies in wood of arborescent Leguminosae. *I.A.W.A. Bull.*, 1 : 180-184.
- Kohl, F.G. 1889. *Anatomisch-physiologische Untersuchungen der Kalksalze und Kieselsäure in der Pflanze*. Marburg.
- Komarek, E.V.; Komarek, B.B. & T.C. Carlyle. 1973. The ecology of smoke particulates and charcoal residues from forest and grassland fires: A preliminary atlas. *Tall Timbers Research Station, Miscellaneous Publication* N° 3.
- Kondo, M. & Y. Kasahara. 1935. Vergleichende Untersuchungen über Aschenbilder der Spelzen von *Chaetochloa*, *Panicum*, *Echinochloa*, *Saccioopsis* und *Syntherisma*. *Berichte des Ohara Instituts für Landwirtschaftliche Forschungen*, 4 (4) : 491-513.
- Kondo, R. 1974. Opal phytoliths - the relationship between the morphological features of opal phytoliths and taxonomic groups of gramineous plants. *Pedologist*, 18 : 2-10.
- Kondo, R. 1976. On the opal phytoliths of trees origins. *Pedologist*, 20 : 176-190.
- Kondo, R. 1977. Opal phytoliths, inorganic, biogenic particles in plants and soils. *Japan Agricultural Research Quarterly*, 11 (4) : 198-203.
- Kondo, R. 1988. Soil genesis and ages of soils from the viewpoint of opal phytolith analysis. *Pedologist*, 32 (2) : 189-203.
- Kondo, R. & Y. Iwasa. 1981. Biogenic opals of humic yellow latosol and yellow latosol in the Amazon region. *Res. Bull. Obihiro Univ.*, 12 : 231-239.
- Kondo, R. & T. Peason. 1981. Opal phytoliths in the tree leaves (part 2): Opal phytoliths in dicotyledonous angiosperm tree leaves. *Res. Bull. Obihiro Univ.*, Series 1, 12 (3) : 217-230.
- Kondo, R. & T. Sase. 1986. Opal phytoliths, their nature and application. *Quaternary Research*, 25 (1) : 31-63.
- Kondo, R. & T. Sumida. 1978. The study of opal phytoliths of tree leaves. I. Opal phytoliths in gymnosperm and monocotyledonous angiosperm tree leaves. *J. Sci. Soil Manure, Japan*, 49 (2) : 138-144.
- Kondo, R.; Childs, C. & I. Atkinson. 1994. *Opal phytoliths of New Zealand*. Manaaki Whenua Press, Lincoln, Canterbury, New Zealand.
- Kondo, R.; Sase, T. & Y. Kato. 1987. Opal phytolith analysis of aridisols with regard to interpretation of paleovegetation. En: Kinloch D.I. et al. (ed.) *Proceeding of the 9th International Soil Workshop, Japan 1987*, : 520-534.
- Kovda, I. & A.A. Golyeva. 1998. Phytoliths as indicator of pedogenesis and history of gilgai complex. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 85.
- Krauskopf, K.B. 1956. Dissolution and precipitation of silica at low temperatures. *Geochimique Cosmochimique, Acta*, 10 : 1-26.

- Krauskopf, K.B. 1959. The geochemistry of silica in sedimentary environments. En: Ireland, H.I. (ed.), "Silica in Sediments." Society Economic Palaeontologists and Mineralogists, Special Publication 7 : 4-19.
- Kunoh, H. & S. Akai. 1977. Scanning electron microscopy and x-ray microanalysis of dumbbell-shaped bodies in rice lamina epidermis (*Oryza sativa*). *Torrey Botanical Club Bull.*, 104 : 309-313.
- Kunoh, H. & H. Ishizaki. 1975. Silicon levels near penetration sites of fungi on wheat, barley, cucumber and morning glory leaves. *Physiological plant Pathology*, 5 : 283- 287.
- Kunoh, H.; Takamatsu, S. & H. Ishizaki. 1978. Cytological studies of early stages of powdery mildew in barley and wheat. III. Distribution of residual calcium and silicon in germinated conidia of *Erysiphe graminis hordei*. *Physiological plant Pathology*, 13 : 319-325.
- Kurmann, M.H. 1982. An opal phytolith and palynomorph study of extant and fossil soils in Kansas (USA). 91st Annual Meet. of Ohio Academy of Science, *Ohio Journal of Science*, 82 (2) : 18.
- Kurmann, M.H. 1985. An opal phytolith and palynomorph study of extant and fossil soils in Kansas (USA). *Palaeogeography, Palaeoclimatology, Palaeoecology*, 49 (3-4) : 217-235.
- Küster, E. 1897 a. Die anatomischen Charaktere der Chrysobalanaceen, insbesondere ihre Kieselablagerungen. *Botanisches Zentralblatt* 69 : 46-54, 97-106, 129-139, 161-169, 193-202, 225-234.
- Küster, E. 1897 b. Über Kieselablagerungen im Pflanzenkörper. *Berichte der deutschen Botanischen Gesellschaft*, 5: 136-138.
- Kutuzova, R.S. 1968. Silica transformation during the mineralization of plant residues. *Soviet Soil Science*, 7: 970-978.

L

- Labouriau, L.G. 1983. Phytolith work in Brazil: a minireview. *The Phytolitharien Newsletter*, 2 (2) : 6-10.
- Labouriau, L.G.; Mosquim, P.R. & L. Morhy. 1973. Desposição de sílica nas folhas de *Casearia grandiflora* St. Hil. *An. Acad. Brasil. Ciênc.*, 45 (3-4) : 545-563.
- Lalueza, C.; Juan, J. & R.M. Albert. 1996. Phytolith analysis on dental calculus, enamel surface and burial soil: information about diet and paleoenvironmental. *Amer. J. of Physical Anthropology*, 101: 101-113.
- Lanning, F.C. 1960. Nature and distribution of silica in strawberry plants. *Amer. Soc. Hort. Asc., Proc.*, 76 : 349-358.
- Lanning, F.C. 1961 a. Silica and calcium in black raspberries. *Amer. Soc. Hort. Asc., Proc.*, 77 : 367-371.
- Lanning, F.C. 1961 b. Calcite in *Lesquerella ovalifolia* trichomes. *Science*, 133 : 380.
- Lanning, F.C. 1963. Plant constituents: Silicon in rice. *Journal of Agriculture and Food Chemistry*, 11 (5) : 435-437.
- Lanning, F.C. 1964. Ash, silica, and calcium in *Lesquerella ovalifolia*. *Kansas Acad. Sci., Trans.*, 67 (3) : 481-485.
- Lanning, F.C. 1966 a. Silica and calcium deposition in the tissues of certain plants. *Advancing Frontiers of Plant Science*, 13 : 55-66.
- Lanning, F.C. 1966 b. Pattern of distribution: Relation of silicon in wheat to disease and pest resistance. *Journal of Agricultural and Food Chemistry*, 14 (4) : 350-352.
- Lanning, F.C. 1966 c. Relation of silicon in barley to disease, cold, and pest resistance. *Journal of Agricultural and Food Chemistry*, 14 (6) : 636-638.
- Lanning, F.C. 1972 a. Ash and silica in *Juncus*. *Bulletin of the Torrey Botanical Club*, 99 (4) : 196-198.
- Lanning, F.C. 1972 b. Ash, SiO₂, CaO, Fe₂O₃ and Al₂O₃ in *Helianthus*. *HortScience*, 7 (2) : 184-186.
- Lanning, F.C. 1977. Ash, silicon, calcium, and copper in "Concord" grape leaves. *HortScience*, 12 (2) : 121-122.
- Lanning, F.C. & L.N. Eleuterius. 1978. Silica and ash in the salt marsh rush *Juncus roemerianus*. *Gulf Research Reports*, 6 (2) : 169-172.
- Lanning, F.C. & L.N. Eleuterius. 1981. Silica and ash in several marsh plants. *Gulf Research Reports*, 7 (1) : 47-52.
- Lanning, F.C. & L.N. Eleuterius. 1983. Silica and ash in tissues of some coastal plant. *Ann. Bot.*, 51 : 835-850.
- Lanning, F.C. & L.N. Eleuterius. 1985. Silica and ash in tissues of some plants growing in the coastal area of Mississippi, U.S.A. *Ann. Bot.*, 56 : 157-172.
- Lanning, F.C. & L.N. Eleuterius. 1987. Silica and ash in native plants of the central and southeastern regions of the United States. *Ann. Bot.*, 60 (4) : 361- 375.
- Lanning, F.C. & L.N. Eleuterius. 1989. Silica deposition in some C₃ and C₄ species of grasses, sedges and composites in the USA. *Ann. Bot.*, 63 : 395-410.
- Lanning, F.C. & L.N. Eleuterius. 1992. Silica and ash in seeds of cultivated grains and native plants. *Ann. Bot.*, 69 : 151-160.
- Lanning, F.C. & T. Garabedian. 1963 a. Distribution of ash, calcium, iron, and silica in the tissues of young *Sorghum* plants. *Kansas Acad. Sci., Trans.*, 66 (3) : 443-448.
- Lanning, F.C. & T. Garabedian. 1963 b. Distribution of ash, calcium, iron, and silica in the tissues of strawberry plants. *Amer. Soc. Hort. Sci., Proc.*, 82 : 287-291.
- Lanning, F.C. & Y. Linko. 1961. Absorption and deposition of silica by four varieties of *Sorghum*. *Journal of Agricultural and Food Chemistry*, 9 (6) : 463-465.
- Lanning, F.C.; Hopkins, T.L. & J.C. Loera. 1980. Silica and ash content and depositional patterns in tissues of mature *Zea mays* L. plants. *Ann. Bot.*, 45 : 549-554.
- Lanning, F.C.; Ponnaiya, B.W. & C.F. Crumpton. 1958. The chemical nature of silica in plants. *Plant Physiology*, 33 : 339-343.
- Lapeyrie, F. 1988. Oxalate synthesis from soil bicarbonate by the mycorrhizal fungus *Paxillus involutus*. *Plant and Soil*, 110 : 3-8.
- Laroche, J. 1967. Localisation de la silice par le microanalyseur a sonde electronique. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 265 : 1695-1697.
- Laroche, J. 1968. Contribution a l'étude de l' *Equisetum arvense* L. III. Recherches sur la nature et la localisation de la silice chez le sporophyte. *Revue Generale de Botanique*, 75 : 65-116.
- Laroche, J. 1969 a. Etude des concrétions siliceuse de l'épiderme de l' *Equisetum arvense* L. au microscope à balayage. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 268 : 2417-2418.

- Laroche, J. 1969 b. État de la silice sur et dans la membrane épidermique des organes aériens stériles d' Equisetum arvense L. *Revue Generale de Botanique*, 76 : 483-489.
- Laroche, J. 1977. La silice et les plantes supérieures. *Revue de Cytologie et de Biologie Végétales*, 40 (1) : 15-45.
- Laroche, J. & D. Robert. 1976. Mise en évidence, en microscopie électronique, du transit de silice a la faveur des parois dans les feuilles d' Equisetum arvense L. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 282 : 1721-1723.
- Laroche, J. & D. Robert. 1979. Séquence des événements conduisant à la silicification de certaines ornementations chez la feuille de Selaginella kraussiana C.R. *Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 288 (11) : 951-953.
- Laroche, J.; Guervin, C. & Le Coq, C. 1975. La silice chez une Equisétacée: Equisetum maximum Lamk. I. Distribution dans les organes aériens stériles. *Le Botaniste*, 57 : 61-74.
- Laroche, J.; Guervin, C.; Le Coq, C. & V.T. Dao. 1970. Intérêt taxonomique de l'excretion siliceuse chez les Equisétacées. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.* 270 : 2958-2960.
- Laroche, J.; Robert, D.; Le Coq, C. & C. Guervin. 1972. Apports de la cytochimie, de la cytophysique, des microscopies électroniques par transmission et à balayage, à l'étude des phénomènes de silicification chez la feuille de Selaginella kraussiana C.R. *Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 275 : 2671-2674.
- Lau, E.; Goldftas, M.; Baldwin, V.D.; Dayanandan, P.; Srinivasan, J. & P.B. Kaufman. 1978. Structure and localization of silica in the leaf and internodal epidermal system of the marsh grass Phragmites australis. *Can. J. Bot.*, 56 : 1696-1701.
- Lauchi, A. & H. Schwander. 1966. Xray microanalyser study on the location of minerals in native plant tissue sections. *Experimentia*, 22 (8) : 503-505.
- Lawlor, E.J. 1989. Taphonomy of phytoliths in the Mohave desert: A preliminary report. *Archaeobotany through phytolith analysis symposium, Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolithien Newsletter*, 6 (1) : 4.
- Lawlor, E.J. 1993. The formation of phytolith (plant silica) deposits: cultural and environmental processes in California's Eastern Mojave Desert. *58th Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolithien Newsletter*, 7 (3) : 6.
- Lawlor, E.J. 1994. Site-formation processes affecting phytolith deposits in the Mojave desert. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 8 (2) : 5.
- Lawlor, E.J. 1995. Distinctive phytoliths from Mohave desert Dicots. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 9 (1) : 6.
- Lawlor, E.J. 1996. Site-formation processes affecting phytoliths. *Phytolith Research Symposium, 1996 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 9 (3) : 11.
- Lawton, J.R. 1978. Some features of the epidermis of grasses. *Proc. of the Electron Microscopy Society of Southern Africa*, 8: 81-82.
- Lawton, J.R. 1980. Observations on the structure of epidermal cells, particularly the cork and silica cells, from the flowering stem internode of Lolium temulentum L. (Gramineae). *Linnean Society of London, Botanical Journal*, 80 (2) : 161-178.
- Leaney F.W.; Osmond, C.B.; Allison, G.B. & H. Ziegler. 1985. Hydrogen-isotope composition of leaf water in C₃ and C₄ plants: its relationship to the hydrogen-isotope composition of dry matter. *Plant*, 164 : 215-220.
- Le Coq, M.C. 1973. Examen au microscope électronique à balayage, des cônes de silice chez les Cypéracées. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 277 : 1301-1303.
- Le Coq, M.C.; Guervin, C.; Laroche, J. & D. Robert. 1973. Mise en place de la silice dans les cellules épidermiques de la feuille d'un Ptéridophyte Selaginella kraussiana. I. *Bull. Mus. Nat. Hist. Nat.*, 3e sér., N° 200, Bot. 13 : 185-195.
- Leeper, G.W. 1955. Diatom skeletons and sponge spicules in soils. *Aust. J. Sci.*, : 59-60.
- Lentfer, C.J. 1995. Modern phytolith assemblages from the Bismarck Archipelago, PNG. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 9 (1) : 6.
- Lentfer, C.J.; Boyd, W.E. & R. Torrence. 1998. Status of phytolith research relating to the archaeology of West New Britain, Papua, New Guinea. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 53.
- Lewin, J. 1961. The dissolution of silica from diatom walls. *Geochimica et Cosmochimica, Acta*, 21 : 182-198.
- Lewin, J. & B.E.F. Reiman. 1969. Silica and plant growth. *Ann. Rev. Plant Physiol.*, 20 : 289-304.
- Lewin, V.C. 1954. Evidence for the role of reduced sulfur compound in silica utilization. *J. G. Physiol.*, 37 (5) : 589-599.
- Lewis, R.O. 1978. Use of opal phytoliths in paleo-environmental reconstruction. *Wyoming Contributions to Anthropology*, 1 : 127-132.
- Lewis, R.O. 1981. Use of opal phytoliths in paleo-environmental reconstruction. *Journal of Ethnobiology*, 1 (1) : 175-181.
- Lewis, R.O. 1983. Results of the phytolith studies from Agate Basin, Wyoming. En: Frison, G.C. & D. Stanford (eds.), "The Agate Basin Site." Academic Press, New York.
- Lewis, R.O. 1985. Phytolith analysis from the McKean site, Wyoming. En: Kornfield, M. & L.C. Todd (eds.), "Ocasional papers on Wyoming Archaeology", 4: 45-51. Office of the Wyoming State Archaeologist, Laramie.
- Lipman, C.B. 1938. Importance of silicon, aluminum and chlorine for higher plants. *Soil Sci.*, 45 : 189-198.
- Lippi, R.D.; Bird, R.M. & D.M. Stemper. 1984. Maize recovered at La Ponga, an early Ecuadorian site. *American Antiquity*, 49 : 118-124.
- Linsbauer, K. 1930. Die epidermis. *Hand. Pfl. Anatomie*, 4 : 27.
- Livingstone, D.A. & W.A. Clayton. 1980. An altitudinal cline in tropical African grass floras and its paleoecological significance. *Quaternary Research*, 13 (3) : 392- 402.
- Lloyd, F.E. 1921. The structure of cereal straws. *Pulp and Paper Magazin* 19 : 935-954, 973-976, 1002-1004, 1025-1026, 1048-1050, 1071-1075.
- Locker, S. & E. Martini. 1986. Phytoliths from the southwest Pacific, site 591. En: Blakeslee, J.H. (ed.), "Initial Reports of the Deep Sea Drilling Project". 90 (2) : 1079-1084, Washington D.C., U.S. Government Printing Office.
- Locker, S. & E. Martini. 1989. Phytoliths at DSDP Site 591 in the southwest Pacific and the aridification of Australia. *Geologische Rundschau* 7 (8/3) : 1165-1172.

- Longstaffe, F.J. & J. Seaquist. 1994. Oxygen isotope composition of silica in eastern North American dune grass: a paleoclimatic indicator revisited. *Geological Association of Canada, Program with abstracts*, 19 : A66.
- Lopez-Saez, J.A. & P. Verdin. 1998. Complementary between a phytolithical diagram and a palynological diagram. The site of Somonino, Poland. 2° Int. Meet. on Phytolith Research, (Abstracts), : 69.
- Lovering, T.S. 1959. Geological significance of accumulator plants in rock weathering. *Amer. Geol. Soc., Bull.*, 70 : 781-800.
- Lovering, T.S. & C. Engel. 1967. Translocation of silica and other elements from rock into *Equisetum* and three grasses. *U.S. Geol. Survey Prof. Papers*, 594-B : 1-3.
- Lowe, J. 1869. On silicified vegetable structure from Zambesi. *Trans. Bot. Soc., Edinburgh*, 9 : 131-134.
- Lü, H.Y. & Y.J. Wang. 1990. A study on plant opal and its application in the explanation of the palaeoenvironment of Qingdao in the past 3000 years. *Chinese Science Bull.*, 35 (6) : 498-503.
- Lü, H.Y. & Y.J. Wang. 1991. A study on phytoliths in loess profile and paleoenvironmental evolution at Heimugou in Luochuan, Shaanxi Province since Late Pleistocene. *Quaternary Science*, 1 : 72-84.
- Lü, H.Y.; Wu, N.; Nie, G.Z. & Y.J. Wang. 1991. Phytolith in loess and its bearing on paleovegetation. En: Liu, T. (ed.), "Loess, environment and global changes." XIII INQUA Congress : 112-123. Science Press, Beijing.
- Lucas, Y.; Luizao, F.J.; Rouiller, J. & D. Nahon. 1993. The relationship between the biological activity of the rain forest and the mineral composition of the soils. *Science*, 260 : 521-523.
- Lue, H.; Wu, N. & G. Ne. 1995. Discovery of bamboo phytolith in the loess- paleosol sequences of Guanzang Basin, Shaanxi Province. *Chinese Science Bull.*, 40 (5) : 405-409.
- Luhan, M. 1963. Die Epidermis von *Agropyron repens*. *Protoplasma*, 56 : 645-660.
- Lutwick, L.E. 1969. Identification of phytolith in soils. En: Pawluk, S. (ed.), "Pedology and Quaternary Research." :78-82. Univ. Alberta Press, Edmonton.

M

- Machado, M.J.; Perez-Gonzalez, A.; Pinilla, A. & G. Benito. 1996. Paleoenvironmental changes based on phytolith analysis in the Axum area (Northern Ethiopia). 1° Europ. Meet. on Phytolith Research (Abstracts), : 66.
- Macphail, R.I. 1981. Soil and botanical studies of the "dark earth". En: Dimbleby, D. & M. Jones (eds.), "The environment of man". British Archaeol. Rep., 87 : 309-329.
- Madella, M. 1995. A preliminary study of phytolith analysis, agriculture and use of plants at Kot Diji (Sindh - Pakistan). *Ancient Sindh*, 2 : 93-108.
- Madella, M. 1996. Phytoliths from a Central Asia loess-paleosol sequence and modern soils: their taphonomical and paleoecological implications. 1° Europ. Meet. on Phytolith Research (Abstracts), : 20.
- Madella, M. 1997. Phytoliths from a Central Asia loess-paleosol sequence and modern soils: their taphonomical and paleoecological implications. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 49-58; Madrid.
- Madella, M. 1998. Understanding archaeological structures by means of phytolith analysis: a test from the iron age site of Kilise Tepe (Turkey). 2° Int. Meet. on Phytolith Research, (Abstracts), : 50.
- Maguire, B. 1972. Bonnetiaceae. *Mem. N.Y. bot. Gdn.* 23 : 131-165.
- Mann, S. 1988. Molecular recognition in biomineralization. *Nature*, 332 : 119-124.
- Mann, S. & C.C. Perry. 1986. Structural aspects of biogenic silica. *CIBA Foundation Symposium*, 121 : 40-58.
- Mann, S.; Perry, C.C.; Williams, R.J.P.; Fyfe, C.A.; Gobbi, G.C. & G.J. Kenedy. 1983. The characterization of the nature of silica in biological systems. *Journal of the Chemical Society, Chemical Communications*, 1314 : 168-170.
- Mariaux, A. 1980. Formation of silica grains in wood as a function of growth rate. *IAWA, Bull.*, 1 (3) : 140-142.
- Martin, A. & J. Benayas. 1996. Silica deposition in the inflorescence bracts and caryopsis of Gramineae of Central Spain. 1° Europ. Meet. on Phytolith Research (Abstracts), : 29.
- Martin, A. & J. Benayas. 1997. Silica deposition in the inflorescence bracts and caryopsis of Gramineae of Central Spain. *Centro de Ciencias Medioambientales, CSIC, Monografías 4* : 147-158; Madrid.
- Martin, L.D. & B.M. Gilbert. 1978. Excavations at Natural Trap Cave. *Transactions of the Nebraska Academy of Science*, 6: 107-118.
- Martinez, G. & M. Osterieth. 1993. Sedimentological characteristics from soil parent materials of eolian origin: Southeastern Buenos Aires province, Argentina. *Wind Blow Sediments in Quaternary Record, Abst.*, : 87.
- Marumo, Y. & H. Yanai. 1986. Morphological analysis of opal phytoliths for soil discrimination in forensic science investigation. *Journal of Forensic Sciences*, 31 (3) : 1039-1049.
- Mathur, K. 1984. Phytolitharians from the Bassein structure, Bombay off-shore, India. *Indian Colloquium on Micropaleontology and Stratigraphy, Proc.*, 10 : 501-504.
- Matsutani, A. 1972. Spodographic analysis of ash from the Kotosh site: A preliminary report. En: Izum, S. & K. Terada (eds.), "Andes 4: Excavations at Kotosh, Peru, 1963 and 1966". : 319-326, University of Tokyo Press, Tokyo.
- Mazoyer, G. 1936. Morphologie et anatomie foliaires des *Stipa* de l'Afrique du Nord. *Bull. Soc. Bot. Hist. Nat., Afr. N.*, 27 : 284-318.
- Mazzoni, M.M. 1979. Contribución al conocimiento petrográfico de la Formación Sarmiento. Barranca S del lago Colhué Huapi, Provincia de Chubut. *Rev. Asoc. Arg. Miner. Petr. y Sedim.*, 10 (3-4) : 33-53.
- McKeague, J.A. & M.G. Kline. 1963 a. Silica in soil solutions I. The form and concentration of dissolved silica in aqueous extracts of some soils. *Can. J. Soil Sci.*, 43 : 70-82.
- McKeague, J.A. & M.G. Kline. 1963 b. Silica in soil solutions II. The absorption of monosilicic acid by soil and by other substances. *Can. J. Soil Sci.*, 43 : 83-96.
- McKeague, J.A. & M.G. Kline. 1963 c. Silica in soil. *Advances in Agronomy*, 15 : 339-396.

- McNaughton, S.J. & J.L. Tarrants. 1983. Grass leaf silification: Natural selection for an inducible defense against herbivores. *Proceedings of the National Academy of Science (USA)*, 80 (3) : 790-791.
- McNaughton, S.J.; Tarrants, J.L.; McNaughton, M.M. & R.H. Davis. 1985. Silica as a defense against herbivory and a growth promoter in African grasses. *Ecology*, 66 (2) : 528-535.
- Medeiros, M.C. & Z.B.L. Guedes. 1973. Composição mineral das partes anatômicas de alguns vegetais em ocorrência na Estado do Ceará. *Rev. Bras. Pesq. Med. & Biol.*, 6 : 61-69.
- Mehra, P.N. & O.P. Sharma. 1965. Epidermal silica cells in the Cyperaceae. *Bot. Gaz.*, 126 (1) : 53-58.
- Mehra, P.N. & O.P. Sharma. 1969. Systematic anatomy of *Cyperus* L. *Res. Bull. Panj. Univ. (NS)*, 20 (1-2) : 119-137.
- Melia, M.B. 1984. The distribution and relationships between palynomorphs in aerosols and deep-sea sediments off the coast of northwest Africa. *Marine Geol.*, 58 : 345-371.
- Mennega, A.M.W. 1972. A survey of the wood anatomy of the new world Hippocrateaceae. En: Ghouse, A.K.M. & M. Yunus (Eds.), "Research trends in plant anatomy".
- Metcalfe, C.R. 1956. Some thoughts on the structure of bamboo leaves. *Bot. Mag., Tokyo*, 69 : 391-400.
- Metcalfe, C.R. 1960. *Anatomy of Monocotyledons. I. Gramineae*. Oxford Clarendon Press.
- Metcalfe, C.R. 1961. The anatomical approach to systematics: General introduction with special reference to recent work on monocotyledons. En: "Recent Advances in Botany, 9^o Botanical Congress" : 146-150.
- Metcalfe, C.R. 1963. Comparative anatomy as a modern botanical discipline with special reference to recent advances in the systematic anatomy of Monocotyledons. *Adv. Bot. Res.*, 1 : 101-147.
- Metcalfe, C.R. 1971. *Anatomy of Monocotyledons. II. Cyperaceae*. Oxford Clarendon Press. 597 p.
- Metcalfe, C.R. 1983. *Anatomy of the Dicotyledons. II. Wood Structure and Conclusion of the General Introduction*. 2^o Ed., Oxford Clarendon Press.
- Metcalfe, C.R. & L. Chalk. 1950. *Anatomy of the Dicotyledons*. Oxford, Clarendon Press. Toronto, Univ. Toronto Press. 1500 p.
- Metcalfe, C.R. & L. Chalk. 1979. *Anatomy of the Dicotyledons. II. Leaves, stem, and wood in relation to taxonomy with notes on economic uses*. Oxford Clarendon Press. 276 p.
- Metcalfe, C.R. & L. Chalk. 1983. *Anatomy of the Dicotyledons. II. Wood Structure and Conclusion of the General Introduction*. 2^o Ed., Oxford, Clarendon Press. 197 p.
- Meunier, J.D. & L. Faure-Denard (eds.). 1998. *Second International Meeting on Phytolith Research. Volume of Abstracts*. Cerege, CNRS – Univ. d'Aix-Marseille. 101 p.
- Meunier, J.D.; Colin, F.; Alarcon, C.; Mbeleg, D. & J.J. Braun. 1998. Biogenic silica and chemical weathering in humid tropical ecosystems. 2^o Int. Meet. on Phytolith Research, (Abstracts) : 82.
- Middleton, W. 1990. An improved method for extraction of opal phytolith from tartar residues on herbivore teeth. *The Phytolitharian Newsletter*, 6 (3) : 25.
- Middleton, W. 1993. The use of opal phytolith analysis in paleoecology reconstruction on St. Catherine's Island, Georgia. 58th Annual Meeting of the Soc. Amer. Archaeology, Abstracts, *The Phytolitharian Newsletter*, 7(3) : 7.
- Mika, V. 1987. Silicon concentrations and forms in cocksfoot (*Dactylis glomerata* L.). *Plant Production*, 33 (8) : 801-806.
- Milanez, F.R. & A.M. Filho. 1956. Nota sobre a ocorrência de sílica no lenho de leguminosas. *Rodriguesia*, 18 (30) : 7-26.
- Milby, T.H. 1971. The leaf anatomy of buffalo grass, *Buchloe dactyloides* (Nutt.) Engelm. *Bot. Gaz.*, 132 (4) : 308-313.
- Miles, S.R. & P.C. Singleton. 1975. Vegetative history of Cinnabar Park in Medicine Bow National Forest, Wyoming. *Amer. Soc. Soil Sci., Proc.*, 39 : 1204-1208.
- Millarakis, L. 1884. *Verkiesselungen von elementaren Organen*. Diss., Würzburg.
- Miller, R.B. 1975. Systematic anatomy of the xylem and comments on the relationships of Flacourtiaceae. *J. Arnold Arbor.* 56 : 20-102.
- Miller, U. 1996. Phytoliths in sediments and soils –stratigraphic and environmental aspects. 1^o Europ. Meet. on Phytolith Research (Abstracts) : 21.
- Miller, U.; Hömström, B. & A. Wasell. 1990. The origin and properties of biogenic and amorphous silica in laminated sediments. En: Saamisto, M. & A. Kahra (eds.), "Proceedings of the Workshop at Lammi Biological Station (4-6. Junio 1990)." Geological Survey of Finland, Special Paper, 14 : 103-104.
- Millington, W.R. & S.R. Gawlik. 1967. Silica in the wall of *Pediastrum*. *Nature*, 216: 68.
- Millot, G. 1960. Silice, silex, silicifications et croissance des cristaux. *Bull. Serv. Carte Géol. Als. Lorr.*, 13 (4) : 129-146.
- Mitsui, S. & H. Takatoh. 1959. Nutritional studies of silicon in graminaceous crops. I. Grow of rice plant without silica and symptoms of silica deficiency. *J. Sci. Soil. manure, Tokyo*, 30 : 535-545.
- Mitsui, S. & H. Takatoh. 1963. Nutritional studies of silicon in graminaceous crops. *Soil Sci. and Pl. Nutr., Tokyo*, 9 (2) : 54-58.
- Miyake, Y. & E. Takahashi. 1978. Silicon deficiency of tomato plant. *Soil Sci. and Plant. Nutr.*, 24 (2) : 175-189.
- Miyake, Y. & E. Takahashi. 1983 a. Effect on silicon on the growth of solution-cultured cucumber plant. *Soil Sci. and Plant. Nutr.*, 29 (1) : 71-83.
- Miyake, Y. & E. Takahashi. 1983 b. Effect on silicon on the growth of cucumber plant in soil culture. *Soil Sci. and Plant. Nutr.*, 29 (4) : 463-471.
- Miyake, Y. & E. Takahashi. 1985. Effect of silicon on the growth of soybean plants in a solution culture. *Soil Sci. and Plant Nutr.*, 31 (4) : 625-636.
- Möbius, M. 1908 a. Über die Festlegung der Kalksalze und Kieselkörper in den Pflanzenzellen. *Berichte der Deutschen Botanischen Gesellschaft*, Bd. 26 a : 29- 37.
- Möbius, M. 1908 b. Über ein eigentümliches Vorkommen von Kieselkörper in der Epidermis und den Bau des Blattes von *Callisia repens*. *Wiesner-Festschrift*, : 81-91.

- Montgomery, D.J. & D.W. Parry. 1979. The ultrastructure and analytical microscopy of silicon deposition in the intercellular spaces of the roots of Molinia caerulea (L.) Moench. *Ann. Bot.*, 44 : 79-84.
- Moore, D. 1984 a. The role of silica in protecting Italian rye grass (Lolium multiflorum) from attack by dipterous stem boring larvae (Oscinella frit and other related species). *Annals of Applied Biology*, 104 : 161-166.
- Moore, D. 1984 b. The distribution of opaline silica bodies in the leaf sheaths of two perennial rye-grass cultivars differing in their susceptibility to attack by dipterous stem borers. *Grass and Forage Science*, 39 : 205-208.
- Mouton, J.A. & M.-T. Pobeguín. 1966. Présence de glomérules siliceux dans la feuille d'une Hippocratéacée de Côte d'Ivoire Cuervea macrophylla (Vahl) Wilczek. *Bull. Soc. Bot. Fr.*, 113 (5-6) : 274-277.
- Mulder, C. & H. Visscher. 1998. Monocot phytoliths as proxy of neo-tectonic activity in the Okavango fan (Botswana, Southern Africa). 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 29.
- Mulholland, S.C. 1982. Various wet-ashing procedures for phytolith extraction from plants. *The Phytolitharien Newsletter* 1 (3) : 4-5.
- Mulholland, S.C. 1985 a. Zinc bromide heavy liquid preparation. *The Phytolitharien Newsletter* 3 (2) : 3-5.
- Mulholland, S.C. 1985 b. Different definitions of phytolith. *The Phytolitharien Newsletter* 3 (3) : 5-6.
- Mulholland, S.C. 1985 c. Trapezoidal grass silica cells: distribution and morphology. 2nd *Phytolith Conference (Abstracts)*, Duluth, *The Phytolitharien Newsletter*, 3 (3) : 6.
- Mulholland, S.C. 1985 d. Grass silica phytoliths. *Soc. for Archaeological Science, Newsletter*, Research Report 5, 8 (2) : 5-6.
- Mulholland, S.C. 1986 a. Classification of grass silica phytoliths. En: Rovner, I. (ed.) "Plant Opal Phytolith Analysis in Archaeology and Paleoecology." Occasional Papers No. 1 of the Phytolitharien, : 41-52, Raleigh, North Carolina State University.
- Mulholland, S.C. 1986 b. Identification of plants in a sediment. En: Rovner, I. (ed.), "Plant Opal Phytolith Analysis in Archaeology and Paleoecology." Occasional Papers of The Phytolitharien N° 1 : 41-51, Raleigh, North Carolina State University.
- Mulholland, S.C. 1986 c. Phytolith studies at Big Hidatsa, North Dakota: preliminary results. En: Clambey, G.K. & R.H. Pemble (eds.), "The Prairie: Past, Present and Future." Proceedings of the Ninth North American Prairie Conference, : 21-24 (July 29 to August 1, 1984). Moorhead, Minnesota, Tri- College University Center for Environmental Studies, Fargo, North Dakota.
- Mulholland, S.C. 1989 a. Phytolith shape frequencies in North Dakota grasses: A comparison to general patterns. *J. Archaeol. Sci.*, 16 : 489-511.
- Mulholland, S.C. 1989 b. Grass opal phytolith production: A basis for archaeological interpretation in the Northern Plains. *Archaeobotany through phytolith analysis symposium, Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharien Newsletter*, 6 (1) : 4.
- Mulholland, S.C. 1990. Arundo donax phytolith assemblages. *The Phytolitharien Newsletter*, 6 (2) : 3-9.
- Mulholland, S.C. 1993. A test of phytolith analysis at Big Hidatsa, North Dakota. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 131-146, University of Pennsylvania, Philadelphia.
- Mulholland, S.C. 1994. The status of method and theory in phytolith analysis. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 8 (2) : 6.
- Mulholland, S.C. 1995. Activities at a Brainerd Habitation: The phytolith evidence. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 9 (1) : 5.
- Mulholland, S.C. & C. Prior. 1992. Processing of phytoliths for Radiocarbon dating by AMS. *The Phytolitharien Newsletter*, 7 (2) : 6-8.
- Mulholland, S.C. & C. Prior. 1993. AMS Radiocarbon dating of phytoliths. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 21-23, University of Pennsylvania, Philadelphia.
- Mulholland, S.C. & G. Rapp, Jr. 1985. Grass silica phytoliths. *Society for Archaeological Sciences Newsletter*, 8 (2) : 5-6.
- Mulholland, S.C. & G. Rapp, Jr. 1989. Characterization of grass phytoliths for archaeological analysis. *Materials Research Society Bulletin*, 14 (3) : 36-39, Errata, *MRS Bulletin*, 14 (5) : 50.
- Mulholland, S.C. & G. Rapp, Jr. 1992. Phytolith Systematics: An introduction. En: Rapp, G., Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." *Advances in Archaeological and Museum Science* 1 : 1-13..
- Mulholland, S.C. & G. Rapp, Jr. 1992. A morphological classification of grass silica-bodies. En: Rapp, G., Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." *Advances in Archaeological and Museum Science* 1 : 65-89.
- Mulholland, S.C. & R.G. Thompson. 1996. Phytolith morphology of wild rice inflorescences. *Phytolith Research Symposium, 1996 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 9 (3) : 11.
- Mulholland, S.C.; Lawlor, E.J. & I. Rovner. 1992. Annotated bibliography of phytolith systematics. En: Rapp, G., Jr. & S.C. Mulholland (eds.): "Phytolith Systematics. Emerging Issues." *Advances in Archaeological and Museum Science* 1 : 277-322.
- Mulholland, S.C.; Rapp, G. Jr. & J.A. Gifford. 1982. Phytoliths. En: Rapp, G. Jr. & J.A. Gifford (eds.), "The Archaeological Geology." Supplementary Monograph 4 : 117-137. Princeton University Press, Princeton, New Jersey.
- Mulholland, S.C.; Rapp, G. Jr. & A.L. Ollendorf. 1988. Variation in phytoliths from corn leaves. *Can. J. Bot.*, 66: 2001-2008.
- Mulholland, S.C.; Rapp, G. Jr.; Ollendorf, A.L. & R. Regal. 1990. Variation in phytoliths within a population of corn (cv. Mandan Yellow Flour). *Can. J. Bot.*, 68 (8) : 1638-1645.
- Murphy, P. 1986. Botanical evidence. En: Lawson, A.J. (ed.), "Barrow excavations in Norfolk 1950-82." East anglian archaeology Report, 29 : 43-45.
- Murthy, L.S.V. 1965. Silica in Sarawak timbers. *Malayan Forester*, 28 : 27-45.

N

- Namba, T. & K.H. Bae. 1981. Pharmacognostical studies on the crude drug "zhú-yé" and the bambusaceous plants V. The comparative anatomical studies on the leaves of the genera Semiarundinaria, Sinobambusa, Shibataea, Tetragonocalamus and Chimonobambusa. *Japanese Journal of Pharmacognosy*, 35 (3) : 205-216.

- Nanko, H. & W.A. Cote. 1980. Crystals and other inclusions in the phloem. En Nanko, H. & W.A. Cote. (eds.), "Bark Structure of Hardwoods Grown on Southern Pine Sites. Syracuse." : 47-51. Syracuse University Press.
- Narasimhan, V.R. & J.T. Rao. 1951. Comparative study of the stem epidermis of Coimbatore canes in cultivation. *Proc. 1st Biennial Conference of sugarcane research workers in the Indian Union*, 2 : 2-41.
- Narwal, R.P. 1973. Silica bodies and resistance to infection in jowar (*Sorghum vulgare* Perc.). *Agra Univ. Journ. of Research (Science)*, 22 (3) : 17-20.
- Nayar, P.K.; Misra, A.K. & S. Patnik. 1975. Rapid determination of silicon in the rice plant. *Plant and Soil*, 42 : 491-494.
- Netolitzky, F. 1900. Mikroskopische Untersuchungen gänzlich verkohlter vorgeschichtlicher Nahrungsmittel aus Tirol. *Zeitschrift für die Untersuchung der Nahrungs und Genußmittel*, 3 : 401-407.
- Netolitzky, F. 1911. Verkieselungen bei den Rubiaceae-Galeae. *Österreichische Botanische Zeitschrift*, 61: 409-412.
- Netolitzky, F. 1912. Kieselmembranen der Dicotyledonenblätter Mitteleuropas. *Österreichische Botanische Zeitschrift*, 62 : 353-359.
- Netolitzky, F. 1914. Die Hirse aus antiken Funden. *Sitzbuch der Kaiserlichen Akademie der Wissenschaften der Math.-Naturwissenschaften*, 123 (6) : 725-759.
- Netolitzky, F. 1929. Die Kieselkörper. Die Kalksalze als Zellinhaltskörper. En: Linsbauer, K. (ed.), "Handbuch der Pflanzenanatomie." Allgemeiner Teil: Cytologie, Bd. 3 / 1 a : 1-19; 101-118.
- Neubauer, H. 1905. Mikrophotographien der für die Nahrungs und Futtermitteluntersuchung wichtigsten Gramineenspelzen. *Landwirtschaftliche Jahrbücher*, 34 : 973-984.
- Neugebohm, L. 1980. Möglichkeiten zur systematischen Einordnung von fossilen Grasblättern an Hand erhaltener Epidermisfragmente. *Jahresbericht des Instituts für angewandte Botanik*, 95/96 : 206-215.
- Newman, R.H. 1983. Asbestos-like fibres of biogenic silica in sugar cane. *The Lancet*, 2 : 857.
- Newman, R.H. & A.L. Mackay. 1983. Silica spicules in canary grass. *Ann. Bot.*, 52 : 927-929.
- Nicholson, J. 1996. Archaeological phytolith analysis from Israel, Jordan & Cyprus. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 52.
- Nielsen, A.E. & J. Christoffersen. 1982. The mechanism of crystal growth and dissolution. En: Nancollas, G.H. (ed.), "Biological Mineralization and Demineralization." : 79-99. Springer, Berlin.
- Normand, D. 1966. Les Kouali., Vochysiacées de Guyane, et leurs bois. *Bois Forêts. Trop.* 110 : 3-11.
- Normand, D. 1967. Les Kouali., Vochysiacées de Guyane, et leurs bois. *Bois Forêts. Trop.* 111 : 5-17.
- Norton, B.E. 1967. Occurrence of silica in *Lepidosperma limicola*. *Aust. J. Sci.*, 29 (10) : 371-372.
- Novorossova, L.E. 1951. Biological accumulation of silica in soils under spruce forest. *Pochvovedenie*, 1951 (2) : 115-118.

0

- Oberholster, R.E. 1968a. A method for separation of plant opal in soils. *South African Journal of Agricultural Science*, 11 (1) : 195-196.
- Oberholster, R.E. 1968b. Opal phytolith in two soil profiles on the Springbok Flats. *South African Journal of Agricultural Science*, 11 (4) : 743-748.
- Oehler, J.H. 1979. Deposition and diagenesis of biogenic silica. En: Trudinger, P.A. & D.J. Swaine (eds.), "Biochemical cycling of mineral-forming elements." : 467-483. Elsevier, Netherlands.
- Ohki, K. 1932. On the systematic importance of spodograms in the leaves of Japanese Bambusaceae. *Journal of the Faculty of Science, University of Tokyo, Section 3 -Botany-*, 4 : 1-29.
- Ohki, K. 1939. Studies on the systematic importance of spodograms in the leaves of Gramineae I. *Botanical Magazine of Tokyo*, 53 : 208-212.
- Okawa, K. 1936 a. Investigation in the physiological action of silica for plant. *Jour. Sci. Soil Manure, Japan*, 10 (1) : 95-110.
- Okawa, K. 1936 b. Investigation on the physiological action of silic acid for plants. II. *Jour. Sci. Soil Manure, Japan*, 10 (2) : 216-221.
- Okawa, K. 1936 c. Investigation on the physiological action of silic acid for plants. III. *Jour. Sci. Soil Manure, Japan*, 10 (2) : 222-243.
- Okawa, K. 1936 d. Investigation on the physiological action of silic acid for plants. IV. *Jour. Sci. Soil Manure, Japan*, 10 (2) : 244-258.
- Okawa, K. 1936 e. Investigation on the physiological action of silic acid for plants. V. *Jour. Sci. Soil Manure, Japan*, 10 (4) : 414-419.
- Okawa, K. 1936 f. Investigation on the physiological action of silic acid for plants. VI. *Jour. Sci. Soil Manure, Japan*, 10 (4) : 420-428.
- Okawa, K. 1937. Investigation on the physiological action of silic acid for plants. VII. *Jour. Sci. Soil Manure, Japan*, 11 (1) : 23-36.
- Okawa, K. & R. Tanaka. 1940. The relation between silicic acid and sulphuric acid on plant. *Jour. Sci. Soil Manure, Japan*, 14 (11) : 703-718.
- Okuda, A. & E. Takahashi. 1965. The role of silicon. *The Mineral Nutrition of the Rice Plant, Proceedings of the Symposium at the International Rice Research Institute Los Banos, Philippines* (4th Technical Meeting-Proceedings), : 123-146, Baltimore.
- Olivero-Sesini, J.; Campos-Alfonso, S. & R. Branco-Boksar. 1996. Análisis de partículas biosilicias en la matriz del sitio arqueológico CH2DO1. San Miguel, Rocha, Uruguay. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 53.
- Ollendorf, A.L. 1986. Tel Mique- Phytoliths from Philistine levels. *Old World Archaeology Newsletter*, 10 (2) : 16.
- Ollendorf, A.L. 1987. Archaeological implications of a phytolith study at Tel Mique (Ekron), Israel. *Journal of Field Archaeology*, 14 : 453-463.
- Ollendorf, A.L. 1992. Toward a classification scheme of sedge (Cyperaceae) phytoliths. En: Rapp, G. Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." Advances in Archaeological and Museum Science 1: 91-111.
- Ollendorf, A.L.; Mulholland, S.C. & G. Rapp, Jr. 1987 a. Phytoliths from some Israeli sedges. *Israel Journal of Botany*, 36 : 125-132.
- Ollendorf, A.L.; Mulholland, S.C. & G. Rapp, Jr. 1987 b. A new apparatus for digestion of plants in phytolith analysis. *The Phytolitharian Newsletter*, 5 (1) : 13-16.
- Ollendorf, A.L.; Mulholland, S.C. & G. Rapp, Jr. 1988. Phytolith analysis as a means of plant identification: *Arundo donax* and *Phragmites communis*. *Ann. Bot.*, 61 : 209-214.
- Oosov, N.I. 1943. Biological accumulation of silica in soils. *Pedology (Pochvovedenie) Acad. Sci. U.S.S.R.*, 9-10 : 30-36.
- Osterieth, M. 1980. Mineralogía y génesis de los suelos más representativos del Partido de Magdalena, Buenos Aires. IX *Reunión Argentina de la Ciencia del suelo. Paraná (Entre Ríos), Actas*, : 1219-1241.

- Osterrieth, M. 1980. Aspectos mineralógicos de suelos de la zona costera del partido de Magdalena, Buenos Aires. *Simposio sobre el problema del litoral atlántico bonaerense, CIC, Actas*, : 173-203.
- Osterrieth, M. 1998 a. Paleosols and their relation to sea level changes during the Late Quaternary in Mar Chiquita, Buenos Aires, Argentina. *Quaternary International*, 51-52 : 43-44.
- Osterrieth, M. 1998 b. Phytoliths in Late Quaternary paleosols of the pampean plain, Buenos Aires, Argentina: Paleoenvironmental implications. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, 1 : 33.
- Osterrieth, M. & G.A. Martinez. 1990. Paleosuelos loésicos de la vertiente nororiental de las Sierras Septentrionales de la provincia de Buenos Aires, Argentina. *Simposio Internacional sobre loess, INQUA, Actas*, : 84-88.
- Osterrieth, M. & G.A. Martinez. 1993. Paleosols on Late Cainozoic loessic sequences in the northeastern side of Tandilia Range, Buenos Aires, Argentina. *Quaternary International*, 17 : 57-65.
- Osterrieth, M. & F. Oyarbide. 1998. Calcium oxalate biominerals generated by fungi in argiudolls of the pampean plains, Argentina. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, 1 : 43.
- Osterrieth, M.; Oyarbide, F. & V. Bordas. 1998. Biominerales de oxalato de calcio en suelos de Laguna de Los Padres, Buenos Aires. XVI *Congreso Argentino de Ciencia del suelo, Córdoba, Actas* 1: 309-310.
- Osterrieth, M.; Zucol, A.F. & A. López de Armentia. 1998. Presencia de restos vegetales carbonizados en secuencias sedimentarias costeras del Holoceno Tardío de Mar Chiquita, Buenos Aires, Argentina. V *Jornadas Geológicas Bonaerenses*, 2 : 251-255.
- Osterrieth, M.; Borrelli, N.; Dal Bo, M.; Goncalvez, A.; Herrera, L.; Mascioli, S.; Rossi, V.; Sierra, P.; Villamil, M.; Oyarbide, F.; Tomas, M.; Bernava, L.V. & R. Mondini. 1998. Hongos formadores de biominerales en diferentes horizontes orgánicos de suelos de Mar del Plata y Mar Chiquita. V *Jornadas Geológicas Bonaerenses*, 1: 185-191.
- Owens, D. 1997. A feasibility study for phytolith research in the Southeast from Scull Shoals in the Oconee National Forest, Georgia. *The Phytolitharian Newsletter*, 10 (2-3) : 6-11.

P

- Palmer, P.G. 1976. Grass cuticles: A new paleoecological tool for East African lake sediments. *Can. J. Bot.*, 54 (15) : 1725-1734.
- Palmer, P.G. & S. Gerberth-Jones. 1986. A scanning electron microscope survey of the epidermis of East African grasses: IV. *Smithsonian Contributions to Botany* 62, Smithsonian Institution Press, Washington D.C. 120 p.
- Palmer, P.G. & S. Gerberth-Jones. 1988. A scanning electron microscope survey of the epidermis of East African grasses: V., and West African Supplement. *Smithsonian Contributions to Botany* 67, Smithsonian Institution Press, Washington D.C. 157 p.
- Palmer, P.G.; Gerberth-Jones, S. & S. Hutchinson. 1985. A scanning electron microscope survey of the epidermis of East African grasses: III. *Smithsonian Contributions to Botany* 55, Smithsonian Institution Press, Washington D.C. 136 p.
- Palmer, P.G. & A.E. Tucker. 1981. A scanning electron microscope survey of the epidermis of East African grasses: I. *Smithsonian Contributions to Botany* 49, Smithsonian Institution Press, Washington D.C. 84 p.
- Palmer, P.G. & A.E. Tucker. 1983. A scanning electron microscope survey of the epidermis of East African grasses: II. *Smithsonian Contributions to Botany* 53, Smithsonian Institution Press, Washington D.C. 72 p.
- Panque Guerrero, G. 1961. Opalo en suelos de Eijo (Sevilla). II *Reunión de Sedimentología CSIC*, : 67-79. Madrid.
- Parameswaran, N. & H.G. Richter. 1984. The ultrastructure of crystalliferous cells in some Lecythidaceae with a discussion of their terminology. *IAWA Bull.*, n.s. 5: 229-236.
- Parente, M.Z.G. 1959/1961. Anatomia do lenho secundaris de *Triplaris gardneriana*. *Wedd. Archos. Jard. bot. Rio de J.* 17 : 251.
- Parfenova, E.I. 1947. Secondary quartz in a podsol horizon. *Dokl. Akad. Nauk. U.S.S.R.*, 58 (8).
- Parfenova, E.I. 1956. Investigations on the minerals of podsol soil in relation to their genesis. *Kora Vivetrivahiya*, 2 : 31-44, Acad. Sci. U.S.S.R.
- Parfenova E.I. & E.A. Yarilova. 1956. The formation of secondary minerals in connexion with the migration of elements. *Pochvovedenie*, 4 : 38-42.
- Parfenova E.I. & E.A. Yarilova. 1958. Problems and methods of microscopic and mineralogic soil investigations. *Soviet Soil Sci.*, : 1331-1338.
- Parmenter, C. & D.W. Folger. 1974. Eolian biogenic detritus in deep sea sediments: a possible index of equatorial ice age aridity, *Science*, 185 (4125) : 695-698.
- Parry, D.W. 1975. The effect of poly-2-vinylpyridine 1-oxide on the deposition of silica in the leaves of *Oryza sativa* L. *Ann. Bot.*, 39 : 815-818.
- Parry, D.W. 1977. The ultrastructural and analytical microscopy of silicon deposits in the roots of *Saccharum officinarum* (L.). *Ann. Bot.*, 41 : 855-862.
- Parry, D.W. & M.J. Hodson. 1982. Silica distribution in the caryopsis and inflorescences bracts of foxtail millet (*Setaria italica* (L.) Beauv.) and its possible significance in carcinogenesis. *Ann. Bot.*, 49 : 531-540.
- Parry, D.W. & M. Kelso. 1975. The distribution of silicon deposits in the roots of *Molinia caerulea* (L.) Moench. and *Sorghum bicolor* (L.) Moench. *Ann. Bot.*, 39 : 995-1001.
- Parry, D.W. & M. Kelso. 1977. The ultrastructure and analytical microscopy of silicon deposits in the roots of *Saccharum officinarum* (L.). *Ann. Bot.*, 41 : 885-862.
- Parry, D.W. & F. Smithson. 1957. Detection of opaline silica in grass leaves. *Nature*, 179 (4567) : 975-976.
- Parry, D.W. & F. Smithson. 1958 a. Techniques for studying opaline silica in grass leaves. *Ann. Bot.*, 22 (88) : 543-549.
- Parry, D.W. & F. Smithson. 1958 b. Silicification of branched cells in the leaves of *Nardus stricta* L. *Nature*, 182 : 1460-1461.
- Parry, D.W. & F. Smithson. 1958 c. Silicification of bulliform cells in grass. *Nature*, 181 (4622) : 1549-1550.
- Parry, D.W. & F. Smithson. 1963. Influence of mechanical damage on opaline silica deposition in *Molinia caerulea* L. *Nature*, 199 (4896) : 925-926.
- Parry, D.W. & F. Smithson. 1964. Types of opaline silica depositions in the leaves of British grasses. *Ann. Bot.*, 28 (109) : 169-185.

- Parry, D.W. & F. Smithson. 1966. Opaline silica in the inflorescences of some British grasses and cereals *Ann. Bot.*, 30 (119) : 524-538.
- Parry, D.W. & S.L. Soni. 1972. Electron-probe microanalysis of silicon in the root of *Oryza sativa* L. *Ann. Bot.*, 36 : 781-783.
- Parry, D.W. & S.L. Soni. 1973. Electron-probe microanalysis of silica deposition in rice. *JOEL (Japan Electron Optical Laboratory) News*, 10E (4) : 23-25.
- Parry, D.W. & A. Winslow. 1977. Electron-probe microanalysis of silicon accumulation in the leaves and tendrils of *Pisum sativum* (L.) following root severance. *Ann. Bot.*, 41 : 275-278.
- Parry, D.W.; Hodson, M.J. & R.H. Newman. 1985. The distribution of silicon deposits in the fronds of *Pteridium aquilinum* L. *Ann. Bot.*, 55 : 77-83.
- Parry, D.W.; Hodson, M.J. & A.G. Sangster. 1984. Some recent advances in studies of silicon in higher plants. *Philosophical Transactions of the Royal Society of London, Series B*, 304 : 537-549.
- Parry, D.W.; O'Neil, C.H. & M.J. Hodson. 1986. Opaline silica deposits in the leaves of *Bidens pilosa* L. and their possible significance in cancer. *Ann. Bot.*, 58 : 641-647.
- Pearsall, D.M. 1978. Phytolith analysis of archeological soils: Evidence for maize cultivation in Formative Ecuador. *Science*, 199 (4325) : 177-178.
- Pearsall, D.M. 1982 a. Phytolith analysis: Applications of a new paleoethnobotanical technique in archaeology. *American Anthropologist*, 84 (4) : 862-871.
- Pearsall, D.M. 1982 b. Maize phytoliths: A clarification. *The Phytolitharien Newsletter*, 1 (2) : 3.
- Pearsall, D.M. 1985. Analysis of soil phytoliths and botanical macroremains from El Bronce Archaeological Site, Ponce, Puerto Rico. En: Robinson, L.S.; Lundberg, E.R. & J.B. Walker (eds.), "Archaeological data recovery at El Bronce, Puerto Rico, Final Report, Phase 2." Appendix B. US Army Corp of Engineers, DACW84-C-0028.
- Pearsall, D.M. 1989. *Paleoethnobotany: A handbook of procedures*. San Diego, Academic Press. 470 p.
- Pearsall, D.M. 1990. Maize imitators: How great a problem? A comment on "Arundo donax phytolith assemblages" by S.C. Mulholland. *The Phytolitharien Newsletter*, 6 (2) : 10-11.
- Pearsall, D.M. 1993. Contributions of phytolith analysis for reconstructing subsistence: Examples from research in Ecuador. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA). Research Papers in Science and Archaeology 10 : 108-124, University of Pennsylvania, Philadelphia.
- Pearsall, D.M. 1994. Investigating New World tropical agriculture: Contributions from phytolith analysis. En: Hather, J. (ed.), "Tropical Archaeobotany. Applications and New Developments." : 115-138, Routledge, London.
- Pearsall, D.M. 1995. Doing paleoethnobotany in the tropical lowlands: Adaptation and innovation in methodology. En: Stahl, P. (ed.), "Archaeology in the Lowland American Tropics: Current Analytical Methods and Applications." : 113-129, Cambridge University Press.
- Pearsall, D.M. 1995. Domestication and agriculture in the New World tropics. En: Price, T.D. & A.B. Gehauer (eds.), "Last Hunters-First Farmers: New Perspectives on the Prehistoric Transition to Agriculture." : 157-192. School of American Research Press, Santa Fe, NM.
- Pearsall, D.M. 1996. Reconstructing subsistence in the lowland tropics: A case study from the Jama River valley, Manabi, Ecuador. En: Reitz, E.J.; Newsom, L. & S. Scudder (eds.), "Case Studies in Environmental Archaeology." : 233-254. Plenum Press, New York.
- Pearsall, D.M. & E.H. Dinan. 1992. Developing a phytolith classification system. En: Rapp, G. Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." Advances in Archaeological and Museum Science 1 : 37-64.
- Pearsall, D.M. & D.R. Piperno. 1990. Antiquity of maize cultivation in Ecuador: Summary and reevaluation of the evidence. *American Antiquity*, 55 (2) : 324-337.
- Pearsall, D.M. & D.R. Piperno. 1993. *Current research in phytolith analysis: Applications in archaeology and paleoecology*. MASCA Research Papers in Science and Archaeology 10, The University Museum of Archaeology and Anthropology, University of Pennsylvania, Philadelphia.
- Pearsall, D.M. & M.K. Trimble. 1983. Phytolith analysis of soil samples: Report 18. En: Clark, J.T. & P.V. Kirch (eds.), "Archaeological Investigations of the Mudlane-Waimea-Kawaihae Road Corridor, Island of Hawaii: An Interdisciplinary Study of an Environmental Transect." Bernice P. Bishop Museum Departmental Report Series 83 (1) : 472-497.
- Pearsall, D.M. & M.K. Trimble. 1984. Identifying past agricultural activity through soil phytolith analysis: A case study from the Hawaiian Islands. *J. Archaeol. Sci.*, 11 : 119-133.
- Pearsall, D.M.; Piperno, D.R. & R. Benfer. 1994. Identifying crops through phytolith analysis. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharien Newsletter*, 8 (2) : 4.
- Pearsall, D.M.; Trimble, M.K. & R. Benfer. 1985. A methodology for quantifying phytolith assemblages in comparative and archaeological contexts. 2nd Phytolith Conference (Abstracts), Duluth, *The Phytolitharien Newsletter*, 3 (3) : 8.
- Pearsall, D.M.; Piperno, D.R.; Dinan, E.H.; Umaluf, M.; Zhao, Z. & R.A. Benfer, Jr. 1995. Distinguishing rice (*Oryza sativa* L.) from wild *Oryza* species through phytolith analysis: Results of preliminary research. *Economic Botany*, 49 (2) : 183-196.
- Pease, D.S. & J.V. Anderson. 1969. Opal phytoliths in *Bouteloua eriopoda* Torr. roots and soils. *Amer. Soc. Soil Sci., Proc.*, 33: 321-322.
- Pecorari, C.; Guerif, J. & P. Stengel. 1990. Fitólitos en suelos pampeanos. Influencia sobre las propiedades físicas determinantes de la evolución de la estructura. *Ciencia del suelo*, 8 (2) : 135-141.
- Peinemann, N. & E.A. Ferreiro. 1972 a. Fitólitos: sílica gel natural. *Anales de Edafología e Agrobiología*, : 1011-1026.
- Peinemann, N. & E.A. Ferreiro. 1972 b. Accumulation of amorphous silica in the Pampas plain. *Zeitschrift für Pflanzenernährung und Bodenkunde*, 132 : 14.
- Peinemann, N.; Tshapek, M.; & R. Grassi. 1970. Properties of phytoliths. *Zeitschrift für Pflanzenernährung und Bodenkunde*, 127 (2) : 126-133.
- Pennington, S. 1993. Hydrogen peroxide/potassium dichromate digestion of dried herbaceous material. *The Phytolitharien Newsletter*, 8 (1) : 6-8.

- Pennington, S. 1994. Towards the routine integration of phytolith into paleoethnobotanical research. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 8 (2) : 6.
- Pennington, T.D. & B.T. Styles. 1975. A generic monograph of the Meliaceae. *Blumea*, 22 : 419-540.
- Perry, C.C. 1989. Chemical studies of biogenic silica. En: Mann, S.; Webb, J. & R.J.P. Williams (eds.), "Biomíneralization: chemical and biochemical perspectives." : 223-256. VCH Verlagsgesellschaft, Weinheim.
- Perry, C.C. & S. Mann. 1986. aspects of biological silicification. En: Crick, R.E. (ed.), "Origin, evolution and modern aspects of biomíneralization." : 419-431. Plenum Press, New York.
- Perry, C.C.; Mann, S. & R.J.P. Williams. 1984. Structural and analytical studies of the silicified macrohairs from the lemma of the grass *Phalaris canariensis* L. *Proceedings of the Royal Society of London, Series B*, 222 : 427-438.
- Perry, C.C.; Mann, S.; Williams, R.J.P.; Watt, F.; Grime, G.W. & J. Takacs. 1984. A scanning electron microprobe study of microhairs from the lemma of the grass *Phalaris canariensis* L. *Proceedings of the Royal Society of London, Series B*, 222 : 439-455.
- Perry, C.C.; Williams, R.J.P. & S.C. Fry. 1987. Cell wall biosynthesis during silicification of grass hair. *Journal of Plant Physiology*, 126 : 437-448.
- Peters, I. 1968. Opalphytolithe-Ihre Brauchbarkeit und Verwendungsmöglichkeiten als pflanzliche Mikrofossilien. *Palaeontographica, Abteilung B*, 123 (1-6) : 243-256.
- Peterson, I. 1983. Plant stones. *Science News*, 124 (6) : 88-89.
- Petrucchi, G.B. 1903. Concrezioni silicee intracellulari nel legno secondario di alcune Dicotiledoni. *Malpighia*, 18 : 23-27.
- Pfeiffer, H. 1921. Der heutige Stand unserer Kenntnisse von den Kegelzellen der Cyperaceen. *Berichte der Deutschen Botanischen Gesellschaft*, 39 : 353-364.
- Pfeiffer, H. 1925. Aus der Entwicklungsgeschichte der Cyperaceen *Berichte der Deutschen Botanischen Gesellschaft*, 43 : 26-32.
- Pfeiffer, H. 1929. Über die Erscheinungen bei der Verkeiselung von Pflanzenzellen insbesondere derer der Cyperaceen. *Berichte der Deutschen Botanischen Gesellschaft*, 47 : 78-82.
- Pinilla, A. & A. Bustillo. 1996. Silicofitolitos en secuencias arcillosas con silcretas. Mioceno Medio, Madrid. 1° Europ. Meet. on Phytolith Research, (Abstracts), : 67.
- Pinilla, A. & A. Bustillo. 1997. Silicofitolitos en secuencias arcillosas con silcretas. Mioceno Medio, Madrid. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 255-266. Madrid.
- Pinilla, A.; Juan-Tresserras, J. & M.J. Machado. (eds.) 1997. *Estado actual de los estudios de fitolitos en suelos y plantas / The state-of-the-art of phytoliths in soils and plants*. First European Meeting on Phytolith Research, September 23rd-26th, 1996, Centro de Ciencias Medioambientales del Consejo Superior de investigaciones Científicas, CSIC, Monografías 4, Madrid. 292 p.
- Pinilla, A.; Machado, M.J. & J. Juan-Tresserras (comp.) 1996. Primer Encuentro Europeo sobre el estudio de fitolitos / First European Meeting on Phytolith Research. September 23rd-26th, 1996, Madrid, (Abstracts of conference papers) 76 p.
- Pinilla, A.; Machado, M.J. & J. Juan-Tresserras. 1998. Silica phytoliths and other biominerals from soils of the mountain area of Madrid (Spain): Content and stratigraphic significance. 2° Int. Meet. on Phytolith Research, (Abstracts), : 86.
- Pinilla, A.; Palomar, L.; Aleixandre, T. & A. Martin. 1996. Calcium oxalate crystals and their relationship with pedological calcium in Madrid region soils. 1° Europ. Meet. on Phytolith Research, (Abstracts), : 22.
- Pinilla, A.; Palomar, L.; Aleixandre, T. & A. Martin. 1997. Calcium oxalate crystals and their relationship with pedological calcium in Madrid region soils. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 59-70. Madrid.
- Piper, C.S. 1939. The use of perchloric acid in digestion of plants materials. *Australian. Chem. Inst. J. and Proc.*, 6 : 421-427.
- Piperno, D.R. 1984 a. A comparison and differentiation of phytoliths from maize (*Zea mays* L.) and wild grasses: Use of morphological criteria. *American Antiquity*, 49 (2) : 361-383.
- Piperno, D.R. 1984 b. Early plant use and cultivation in the Santa Marta Basin, Panamá: data from phytoliths and pollen. En Lange, F. (ed.): "Recent advances in Isthmian Archaeology." : 85-121. British Archaeological Reports.
- Piperno, D.R. 1985 a. Phytolith analysis and tropical paleo-ecology: Production and taxonomic significance of siliceous forms in New World plant domesticates and wild species. *Review of Palaeobotany and Palynology*, 45 (3-4) : 185-228.
- Piperno, D.R. 1985 b. Phytolith taphonomy and distributions in archaeological sediments from Panama. *J. Archaeol. Sci.*, 12 (4) : 247-267.
- Piperno, D.R. 1985 c. The application of phytolith analysis to paleo-environmental reconstruction in the tropics: comparison with a pollen sequence from the Gatun Basin, Panama. *American Antiquity*, 59 (225) : 13-19.
- Piperno, D.R. 1985 d. Phytolith records from prehistoric agricultural fields in the Calima Region. *Pro Calima*, 4 : 37-40, Vereinigung Pro Calima, Basel.
- Piperno, D.R. 1985 e. Further comments on the maize-diagnostic phytolith. *The Phytolitharian Newsletter*, 3 (2) : 3.
- Piperno, D.R. 1986 a. A survey of phytolith production and taxonotny in non- graminaceous plants: Implication for paleoecological reconstruction. En: Rovner, I. (ed.), "Plant Opal Phytolith Analysis in Archaeology and Paleoecology." Occasional Papers of The Phytolitharian N° 1 : 35-40, Proceedings of the 1984 Phytolith Research Workshop, Raleigh, North Carolina State University.
- Piperno, D.R. 1986 b. The analysis of phytoliths from the Vegas Site OGSE-80, Ecuador. En: Stothert, K. (ed.), "The Vegas Culture: Early Prehistory of Southwestern Ecuador." Guayaquil, Museo Antropológico de Banco Central del Ecuador.
- Piperno, D.R. 1986 c. Fitolitos, arqueología y cambios prehistóricos en la historia vegetal de una parcela de cincuenta hectareas en la Isla de Barro Colorado, Panamá. En: Leigh, E.; Rand, A.S. & D. Windsor (eds.), "The Ecology of a Tropical Forest: Seasonal Rhythms and Long-Term Changes." Smithsonian Institution Press, Washington D.C.
- Piperno, D.R. 1987. Phytolith evidence for cultivars, especially maize. En: Siemens, A. & A. Gomez-Pompa (eds.), "Prehistoric Wetland Agriculture in Central Veracruz, Mexico."
- Piperno, D.R. 1988 a. *Phytolith Analysis. An archaeological and geological perspective*. Academic Press, London, 280 p.
- Piperno, D.R. 1988 b. Phytoliths analysis. En: Miller, N.F. & A. Yentsch (eds.), "Archaeobotanical result from the 1987 excavation at Morven (Princeton, New Jersey)"; Morven Interim Report N° 2 : 50-55. New Jersey State Museum.

- Piperno, D.R. 1989. The occurrence of phytoliths in the reproductive structures of selected tropical angiosperm and their significance in tropical paleoecology, paleoethnobotany and systematics. *Review of Paleobotany and Palynology*, 61: 147-173.
- Piperno, D.R. 1991. The status of phytolith analysis in the American tropics. *Journal of World Prehistory*, 5 (2) : 155-191.
- Piperno, D.R. 1993. Phytolith and charcoal records from deep lake cores in the American Tropics. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 58-72, University of Pennsylvania, Philadelphia.
- Piperno, D.R. 1997. Phytoliths and microscopic charcoal from LEG 155. A vegetation and fire history of the Amazon Basin during the last 75 K.Y. En: Flood, R.D.; Piper, D.J.W.; Klaus, A. & L.C. Peterson (eds.), "Proceeding of the Ocean Drilling Program." Scientific Results, 155 : 411-418.
- Piperno, D.R. & P. Becker. 1996. Vegetational history of a site in the Central Amazon Basin derived from phytolith and charcoal records from natural soils. *Quaternary Research*, 45 : 202-209.
- Piperno, D.R. & K.M. Clary. 1984. Early plant use and cultivation in the Santa Maria Basin, Panama: Data from phytoliths and pollen. En: Lange, F.W. (ed.), "Recent Developments in Isthmian Archaeology: Advances in the Prehistory of Lower Central America." British Archaeological Reports, International Series 212 : 85-121.
- Piperno, D.R. & D.M. Pearsall. 1989. Some comments on the role of phytolith analysis in tropical palaeoethnobotany and palaeoecology. *Archaeobotany through phytolith analysis symposium, Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharian Newsletter*, 6 (1) : 3
- Piperno, D.R. & D.M. Pearsall. 1993 a. Phytoliths in the reproductive structures of maize and teosinte: implications for the study of maize evolution. *Journal of Archeological Science*, 20 (3) : 337-362.
- Piperno, D.R. & D.M. Pearsall. 1993 b. The nature and status of phytolith analysis. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 918, University of Pennsylvania, Philadelphia.
- Piperno, D.R. & D.M. Pearsall. 1998. The silica bodies of tropical American grasses: Morphology, taxonomy, and implications for grass systematics and fossil phytolith identification. *Smithsonian Contributions to Botany* 85. Smithsonian Institution Press, Washington D.C. 40 p.
- Piperno D.R. & V. Starczak. 1985. Numerical analysis of maize and wild grass phytoliths using multivariate techniques. *2nd Phytolith Conference (Abstracts), Duluth, The Phytolitharian Newsletter*, 3 (3) : 6.
- Piperno, D.R.; Bush, M.B. & P.A. Colinvaux. 1990. Paleoenvironments and human occupation in late-glacial Panama. *Quaternary Research*, 33 : 108-116.
- Piperno, D.R.; Clary, K.; Cooke, R.; Ranere, A.J. & D. Weiland. 1985. Preceramic maize in central Panama: Phytolith and pollen evidence. *American Anthropologist*, 87 (4) : 871-878.
- Pireyre, N. 1961. Contribution à l'étude morphologique, histologique et physiologique des cystolithes. *Rev. Cyt. et Biol. Végét.*, 23 : 93-320.
- Pironon, J.; Meunier, J.D.; Alexandre, A. & R. Mathieu. 1998. Individual characterisation of phytoliths by FT-IR and Raman Microspectroscopies. *2^o Int. Meet. on Phytolith Research, (Abstracts)*, : 71.
- Pobeguín, T. 1943. Les oxalates de calcium chez quelques angiospermes: étude physicochimique, formation, destin. *Annales de Sciences Naturelles, Botanique, II séries*, : 1-15.
- Polcyn, M.; Polcyn, I. & I. Rovner. 1998. Application of phytolith analysis to a particular research problem within an archaeological site in southern Poland. *2^o Int. Meet. on Phytolith Research, (Abstracts)*, : 59.
- Polcyn, M.; Polcyn, I.; Rovner, I. & K. Neumann. 1996. Phytolith research in Burkina Faso and Nigeria, West Africa. *1^o Europ. Meet. on Phytolith Research (Abstracts)*, : 30.
- Polcyn, M.; Polcyn, I.; Rovner, I. & K. Neumann. 1997. Phytolith contribution to paleoenvironmental investigations in the Sahel of Burkina Faso, West Africa. *Centro de Ciencias Medioambientales, CSIC, Monografías* 4 : 181-183. Madrid.
- Ponnaiya, B.W.X. 1951. Studies in the genus *Sorghum*: II. The cause of resistance in *Sorghum* to the insect pest *Atherigona indica* M. *Madras University Journal, Section 8 (Science)* 21: 203-217.
- Ponnaiya, B.W.X. 1960. Silica deposition in *Sorghum* roots and its possible roles. *Madras Agricultural Journal*, 47 : 31-32.
- Postek, M.T. 1981. The occurrence of silica in the leaves of *Magnolia grandiflora* L. *Bot. Gaz.*, 142 (1) : 124-134.
- Powers-Jones, A.H. 1988. Technical update on "a simple preparation technique for the study of opal phytolith from Archaeological and Quaternary sediments". *The Phytolitharian Newsletter*, 5 (3) : 9.
- Powers-Jones, A.H. 1989. The use of styrolite as a mounting medium in phytolith analysis. *The Phytolitharian Newsletter*, 6 (1) : 6-8.
- Powers-Jones, A.H. 1992. Great expectations: A short historical review of European phytoliths systematics. En: Rapp, G., Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." Advances in Archaeological and Museum Science 1: 15-35.
- Powers-Jones, A.H. 1992. Phytoliths, dirt and debris: The development of a "parallel taxonomy". *58th Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharian Newsletter*, 7 (3) : 7.
- Powers-Jones, A.H. 1994 a. Phytolith analysis in the interpretation of archaeological deposits. *Whither Environmental Archaeology, Oxbow monograph*, 38 : 41-49. Oxford.
- Powers-Jones, A.H. 1994 b. Phytoliths: A process-driven approach?. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts, The Phytolitharian Newsletter*, 8 (2) : 5.
- Powers-Jones, A.H. & D.D. Gilbertson. 1987 a. A simple preparation technique for the study of opal phytoliths from archaeological and Quaternary sediments. *J. Archaeol. Sci.*, 14 (5) : 529-535.
- Powers-Jones, A.H. & D.D. Gilbertson. 1987 b. Phytolith analysis of the archaeological sites at Baleshare and Hornish Point, Outer Hebrides. *University of Sheffield Heritage Landscape Programme Contract Report N° 2 for the Central Excavation Unit, Scottish Development Department, Edinburgh*.

- Powers-Jones, A.H. & J. Padmore. 1993. The use quantitative methods and statistical analysis in the study of opal phytoliths. En: Pearsall, D.M. & D. Piperno (eds.), "MASCA Research papers in Science and Archaeology. Current research in phytolith analysis: applications in archaeology and paleoecology." 10 : 47-56.
- Powers-Jones, A.H.; Echlin, P. & M. Jones. 1997. Investigating ancient plant-water relations by means of the analytical microscopy of phytoliths. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 245-254, Madrid.
- Powers-Jones, A.H.; Gilbertson, D.D. & G.E.M. Jones. 1986. The prospects for environmental discrimination in coastal sand dunes on the basis of studies of phytolith type and abundance. *University of Sheffield Heritage Landscape Programme Contract Report No. 1 for the Central Excavation Unit, Scottish Development Department, Edinburgh*. 133 p.
- Powers-Jones, A.H.; Padmore, J. & D.D. Gilbertson. 1989. Studies of late prehistoric and modern opal phytoliths from coastal sand dunes and machair in north west Britain. *J. Archaeol. Sci.*, 16 : 27-45.
- Prance, G.T. 1968. The systematic position of *Rhabdodendron* Gilg & Pilg. *Bull. Jard. bot. État. Brux.* 38 : 127-146.
- Prance, G.T. 1972. A monograph of the Rhabdodendraceae. *Flora Neotropica, Monograph* 11.
- Prat, H. 1932. L'épiderme des Graminées: Etude anatomique et systématique. *Annales des Sciences Naturelles Botanique et Biologie Végétale*, Séries 10, 14 : 117-324.
- Prat, H. 1933 a. Les affinités de blés (*Triticum*) et des chiendients (*Agropyrum*) d'après leurs caracteres épidermiques. *Trans. Roy. Soc. Can., section 5* : 103-105.
- Prat, H. 1933 b. Remarques sur la position systématique du genre *Jouvea* (Four.) et sur les limites de la tribée des Hordees. *Société Botanique de France, Bulletin*, 80 : 357-367.
- Prat, H. 1934 a. Contribution à l'étude systématique et histologique des Chloridées. *Société Botanique de France, Bulletin*, 81 : 475-491.
- Prat, H. 1934 b. Remarques sur les caracteres épidermiques des especes américaines du genre *Agropyrum*. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 198 : 1170-1172.
- Prat, H. 1935 a. Sur l'examen microscopique des epidermes vegetaux. *Soc. Fr. Microscopie, Bull.*, 4 : 86-104.
- Prat, H. 1935 b. Contribution à l'étude systématique et histologique des Festucées. *Société Botanique de France, Bulletin*, 82 : 498-506.
- Prat, H. 1936. La systématique des Graminées. *Annales des Sciences Naturelles (Botanique)*, Séries 10 (18) : 165-258.
- Prat, H. 1948 a. General features of the epidermis in *Zea mays*. *Annals of the Missouri Botanical Garden*, 35 : 341-351.
- Prat, H. 1948 b. Histo-physiological gradients and plant organogenesis (Part I). *Bot. Rev.*, 14 : 603-643.
- Prat, H. 1951. Histo-physiological gradients and plant organogenesis (Part II). *Bot. Rev.*, 17 : 693-746.
- Prat, H. 1960. Vers une classification naturelle des Graminées. *Société Botanique de France, Bulletin*, 107 (32) : 32-79.
- Prat, H. 1961. Emploi des caracteres épidermiques dans la classification des Gramineae. *Recent Advances in Botany*, 1 : 99-102.
- Prat, H. & C. Vignal. 1968. Utilization des particularités de l'épiderme pour l'identification et la recherche des affinités des graminées. *Bol. Soc. Arg. Bot. -Suma Agrostológica*, 12 : 155-166.
- Prior, C. & S.C. Mulholland. 1993. AMS dating of phytoliths: The bearskin point example. *58th Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharien Newsletter*, 7 (3) : 6.

Q

- Quekett, J. 1855. *A practical treatise on the microscope*. 3rd Ed. London.
- Quekett, J. 1856. On the non existence of polarizing silica in the organic kingdom. *Amer. J. Sci.*, 2 : 21.

R

- Raeseide, J.D. 1970. Some New Zealand plant opals. *New Zealand Journal of Science*, 13 : 122-132.
- Raleigh, G.J. 1939. Evidence for the essentiality of silicon for growth of the beet plant. *Plant Physiology*, 14 : 823-828.
- Raleigh, G.J. 1945. Silicon in plant growth. *Soil Science*, 60 : 133-135.
- Ramsey, J. & I. Rovner. 1989. Phytolith extraction from equid tooth cementum. *Archaeobotany through phytolith analysis symposium, Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharien Newsletter*, 6 (1) : 4.
- Rands, R.L. 1987. Phytoliths in archaeological ceramic: Data from Paleocene region, Mexico. *The Phytolitharien Newsletter*, 4 (3) : 5-7.
- Rapp, G. 1986 a. Morphological classification of phytoliths. En: Rovner, I. (ed.), "Plant Opal-Phytolith Analysis in Archaeology and Paleocology." Occasional Paper N°1 of The Phytolitharien, : 33-34, Raleigh, North Carolina State University.
- Rapp, G. 1986 b. Comments on a Phytolith Research agenda. En: Rovner, I. (ed.), "Plant Opal-Phytolith Analysis in Archaeology and Paleocology." Occasional Paper N°1 of The Phytolitharien, : 132-137, Raleigh, North Carolina State University.
- Rapp, G. & S.C. Mulholland. (eds.). 1992. *Phytolith systematics. Emerging issues*. Advances in Archaeological and Museum Science 1, Plenum Press, New York, London. 350 p.
- Rattel, C. 1984. Extraction of opal phytoliths from plant samples. *The Phytolitharien Newsletter*, 2 (3) : 7-8.
- Raven, J.A. 1983. The transport and function of silicon in plants. *Biological Reviews of the Cambridge Philosophical Society*, 58 : 179-207.
- Raymond, R. & M.J. Andrejko (eds.). 1983. *Mineral matter in peat: Its occurrence, form and distribution*. Los Alamos Lab. Publication LA-9907-OBES.
- Reade, J.B. 1837 a. Further observation on the structure of the solid materials found in the ashes of recent and fossil plants. *The London, Edinburgh and Dublin Philosophical Magazin and Journal of Science*, 10 : 413-417.
- Reade, J.B. 1837 b. On the existence of structure in the ashes of plants and their analogy to the osseous system in animals. *The London, Edinburgh and Dublin Philosophical Magazin and Journal of Science*, 11 : 13-17.
- Record, S.J. 1925. Cystoliths in wood. *Tropical wood*, 3 : 10-12.
- Record, S.J. 1927. Occurrence of calcium carbonate deposits in wood. *Tropical wood*, 12 : 22-26.
- Reid, J.S. 1947. Silica in beech timbers. *The New Zealand Journal of Forestry*, 5 : 330-331.

- Remezova, G.L.; Federov, K.N. & E.F. Tananykina. 1974. A method for studying phytoliths in plants and soils. *Pochvovedenie*, 29 (4) : 98-100.
- Renfrew, J.M. 1973. *Palaeoethnobotany: the prehistory food plants of the near east and Europe*. Columbia University Press, New York. 245 p.
- Retallack, G.J. 1992. Middle Miocene fossil plants from Fort Ternan (Kenya) and evolution of African grasslands. *Paleobiology*, 18 (4) : 383-400.
- Richardson, W. 1920. The ash of dune plants. *Science*, 51 (1326) : 546-551.
- Richter, H.G. 1980. Occurrence, morphology, and taxonomic implications of crystalline and siliceous inclusions in the secondary xylem of the Lauraceae and related families. *Wood Science and Technology*, 14 : 35-44.
- Riquier, J. 1960. Les phytolithes de certains sols tropicaux et des podzoles. *7th International Congress of Soil Science, Transactions*, 4 : 425-431.
- Robert, D.; Laroche, J.; Guervin, C.; Le Coq, C. & A. Sauvanet. 1973. Mise en place de la silice dans les cellules epidermiques de la feuille d'une Pteridophyte: *Selaginella kraussiana* II. Etude ultrastructurale. *Bulletin du Museum National d'Histoire Naturelle*, Series 3, Botanique 14 : 211-233.
- Robinson, M. & V. Straker. 1991. Silica skeletons of macroscopic plant remains from ash. En: Renfrew, J.M. (ed.), *"New Light on Early Farming"*. Symposium of the International Work Group for Palaeoethnobotany 7 : 3-13, Edinburgh.
- Robinson, R.L. 1979 a. Biosilica analysis: Paleoenviromental reconstruction of 41LL254. En: Assad, C. & D.R. Potter (eds.), *"An Intensive Archeological Survey of Enchanted Rock State Natural Area, Llano and Gillespie Counties, Texas."* Center for Archeological Research, San Antonio, University of Texas Archeological Survey Report, 84 : 125-144.
- Robinson, R.L. 1979 b. Biosilica and climatic change at 41GD21 and 41GD21A. En: Fox, D.E. (ed.), *"Archeological Investigations of Two Prehistoric Sites on the Coleta Creek Drainage, Goliad County, Texas."* Center for Archeological Research, San Antonio, University of Texas Archeological Survey Report, 69 : 102-113.
- Robyns, A. 1963. Essai de monographie du genre *Bombax* s.l. (Bombacaceae). *Bull. Jard. bot. État. Brux.* 33 : 1-313.
- Rodriguez Vaquero, J. 1960. Métodos de maceración para tejidos epidérmicos. *Tribuna Farmacéutica, Tucumán*, 2 (1) : 21-26.
- Rosanof, S. 1871. Über Kieselsäureablagerungen in einigen Pflanzen. *Botanische Zeitung*.
- Rosen, A.M. 1987. Phytolith studies at Shiqmim. En: Levy, T.E. (ed.), *"Shiqmim I: Studies concerning Chalcolithic Societies in the Northern Negev Desert, Israel (1982-1984)." British Archaeological Reports, International Series 356 : 243-249.*
- Rosen, A.M. 1989. Microbotanical evidence for cereals in Neolithic levels at Tel Teo and Yiftahel in the Galilee, Israel. *Journal of the Israel Prehistoric Society*, 22 : 68-77.
- Rosen, A.M. 1991. Phytoliths as indicator of ancient irrigation farming. En: Anderson-Gerfaud, P. (ed.), *"Préhistoire de l'Agriculture: Nouvelles Approches Expérimentales et Ethnographiques."* CNRS, : 1-7, Paris.
- Rosen, A.M. 1992. Preliminary identification of silica skeletons from Near Eastern archaeological sites: An anatomical approach. En: Rapp, G. Jr. & S.C. Mulholland (eds.), *"Phytolith Systematics. Emerging Issues."* Advances in Archaeological and Museum Science, 1: 129-147.
- Rosen, A.M. 1993. Phytolith evidence for early cereal exploitation in the levant. En: Pearsall, D.M. & D. Piperno (eds.), *"MASCA Research papers in Science and Archaeology. Current research in phytolith analysis: applications in archaeology and paleoecology."* 10 : 160-171.
- Rosen, A.M. 1995. Phytolith evidence for Mousterian and Epipaleolithic plant exploitation at Hayonim Cave, Israel. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 9 (1) : 5.
- Rosen, A.M. 1996. Phytolith evidence from mousterian plant exploitation at Tor Faraj, Jordan. *1^o Europ. Meet. on Phytolith Research (Abstracts)*, : 55.
- Rosen, A.M. 1998. Phytolith evidence for environmental and agricultural change in iron age Saka-Wusun sites of Southern Kazakhstan. *2^o Int. Meet. on Phytolith Research, (Abstracts)*, : 49.
- Rosen, A.M. & S. Weiner. 1994. Identifying ancient irrigation: a new method using opaline phytoliths from emmer wheat. *J. Archaeol. Sci.*, 21 : 125-132.
- Rothbuhr, L. & F. Scott. 1957. The study of the uptake of silicon and phosphorus by wheat plants with radioactive methods. *Biochem. Jour.*, 65 : 240-245.
- Rovner, I. 1971. Potential of opal phytoliths for use in paleoecological reconstruction. *Quaternary Research*, 1 (3) : 343-359.
- Rovner, I. 1972. Note on a safer procedure for opal phytolith extraction. *Quaternary Research*, 2 (4) : 591.
- Rovner, I. 1975. Plant opal phytolith analysis in Midwestern archaeology. *Michigan Academician*, 7 (2) : 129-137.
- Rovner, I. 1983 a. Plant opal phytolith analysis: Major advances in archaeobotanical research. En: Schiffer, M.B. (ed.), *"Advances in Archaeological Method and Theory."* 6 : 225-266. New York, Academic Press.
- Rovner, I. 1983 b. Phytolith analysis. En: Turnbow, C.; Jobe, C. & N. O'Malley (eds.), *"Archaeological excavation of the Goolman, DeVary and Stone sites in Clark County, Kentucky."* Archaeology Report N° 78 : 269-279. University of Kentucky, Lexington.
- Rovner, I. 1984 a. A comprehensive bibliography of dissertation/theses in plant silica and phytolith research. *The Phytolitharian Newsletter*, 2 (3) : 46.
- Rovner, I. 1984 b. Archaeometric uses of plant opal phytolith analysis. *1984 Symposium on Archaeometry, Abstracts*, : 120. Smithsonian Institution, Washington.
- Rovner, I. 1985. Phytolith analysis at Alta Toquima Village, Nevada: Particles in the pines. *2nd Phytolith Conference (Abstracts)*, Duluth, *The Phytolitharian Newsletter*, 3 (3) : 9.
- Rovner, I. (ed.) 1986 a. *Plant opal phytolith analysis in archaeology and paleoecology*. Proceedings of the 1984 Phytolith Research Workshop North Carolina State University, Occasional Papers of the Phytolitharian N°1, Raleigh, North Carolina State University. 147 p.
- Rovner, I. 1986 b. The history of phytolith analysis in Archaeology. En: Rovner, I. (ed.), *"Plant Opal Phytolith Analysis in Archaeology and Paleoecology."* Occasional Papers N°1 of The Phytolitharian, : 1-3, Raleigh, North Carolina State University.

- Rovner, I. 1986 c. Downward percolation of phytoliths in stable soils: A non-issue. En: Rovner, I. (ed.), "Plant Opal Phytolith Analysis in Archaeology and Paleoecology." Occasional Papers N°1 of The Phytolitharian, : 23-30, Raleigh, North Carolina State University.
- Rovner, I. 1986 d. Phytolith sampling and research design in archaeology. En Rovner, I. (ed.), "Plant Opal Phytolith Analysis in Archaeology and Paleoecology." Occasional Papers N°1 of The Phytolitharian, : 111-122, Raleigh, North Carolina State University.
- Rovner, I. 1988 a. Macro- and micro-ecological reconstruction using plant opal phytolith data from archaeological sediments. *Geoarchaeology*, 3 (2) : 155-163.
- Rovner, I. 1988 b. Fitólitos en las plantas: un factor probable en los orígenes de la agricultura. En: Manzilla, L.(ed.), "Estudio sobre la Revolución Neolítica y la Revolución Urbana." Arqueología, serie monográfica 2 (Coloquio Gordon Childe), Inst. de Invest. Antrop., U.N.A.M., México.
- Rovner, I. 1989. New methods of microscopic imaging and rapid image analysis of chaotic microparticle morphology. *Archaeobotany through phytolith analysis symposium, Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharian Newsletter*, 6 (1) : 3.
- Rovner, I. 1990 a. The cross shape phytolith revisited: typological myth and reality. *The Phytolitharian Newsletter*, 6 (3) : 58.
- Rovner, I. 1990 b. Fine-tuning floral history with opal phytolith analysis. En: Kelso, W. & R. Most (eds.), "Earth patterns essays in landscape archeology." The University Press of Virginia. Charlottesville.
- Rovner, I. 1990 c. Extracción de fitólitos de muestras de suelos. *Antropológicas*, 4 : 49-53.
- Rovner, I. 1993. Getting down to specifics: phytolith analysis in historic period sites. *58th Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolitharian Newsletter*, 7 (3) : 7.
- Rovner, I. 1994. Floral history by the back door: A test of phytolith analysis in residential yards at Harpers Ferry. *Historical Archaeology*, 28 (4) : 37-48.
- Rovner, I. 1995 a. Mien, mean and meaning: limits of conventional typology in phytolith analysis. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 9 (1) : 7.
- Rovner, I. 1995 b. The Bleach Bomb: Weapon of mass destruction?. *The Phytolitharian Newsletter*, 9 (2) : 2-3.
- Rovner, I. 1996. Macroecological data from phytolith analysis of the microecology of small hunter-gatherer archaeological sites of the Eastern United States. *1° Europ. Meet. on Phytolith Research (Abstracts)*, : 56.
- Rovner, I. 1998 a. Cultural behavior and botanical history: Phytolith analysis in small places and narrow intervals. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 47.
- Rovner, I. 1998 b. Understanding morphometry: Basic methods and concepts in phytolith classification. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 70.
- Rovner, I. & M. Polcyn. 1996. The bleach bomb and chlorine gas. *The Phytolitharian Newsletter*, 10 (3) : 2.
- Rovner, I. & J.C. Russ. 1992. Darwin and design in phytolith systematics: Morphometric methods for mitigating redundancy. En: Rapp, G. Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." Advances in Archaeological and Museum Science 1: 253-276.
- Rovner, I. & J. Zurita Noguera. 1986. Miscellaneous modifications of phytolith laboratory procedures. *The Phytolitharian Newsletter*, 4 (1) : 5-6.
- Rowlett, R.M. & D.M. Pearsall. 1988. Phytoliths dating by thermoluminescence. *The Phytolitharian Newsletter*, 5 (3) : 8.
- Rowlett, R.M. & D.M. Pearsall. 1993. Archaeological age determinations derived from opal phytoliths by thermoluminescence. En: Pearsall, D.M. & D.R. Piperno(eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 25-29. University of Pennsylvania, Philadelphia.
- Rudall, P.; Gregory, M. & M. Chase. 1996. Silica bodies in leaves of Monocotyledons. *1° Europ. Meet. on Phytolith Research (Abstracts)*, : 31.
- Runge, F. 1995. Potential of opal phytoliths for use in paleoecological reconstruction in the humid tropics of Africa. *Zeitschrift für Geomorphologie, N.F., Supplement-Bd. 99* : 53-63.
- Runge, F. 1996 a. Leaf phytoliths and silica skeletons from East African plants. PHOTO-CD (ROM) with 100 light microscope photos and comments, Paderborner Geographische Studien (PGS), Paderborn.
- Runge, F. 1996 b. Opal-Phytolithe in Pflanzen aus dem humiden und semi-ariden Osten Afrikas und ihre Bedeutung für die Klima- und Vegetationsgeschichte. *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie*, 118 (3) : 303-363.
- Runge, F. 1996 c. Opal phytolith and silica skeletons from the leaves of East African plants. *1° Europ. Meet. on Phytolith Research (Abstracts)*, : 32.
- Runge, F. 1998 a. Opal-Phytolithe in den Tropen Afrikas und ihre Verwendung bei der Rekonstruktion paläoökologischer Umweltverhältnisse. *Habilitationsschrift im Fach Geographie der Universität –GH Paderborn, Paderborn*. 277p.
- Runge, F. 1998 b. Opal phytolith spectra from Central Africa Phytolith classification and vegetation history research. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 30.
- Runge, F. 1998 c. The effect of dry oxidation temperature (500°C-800°C) and of natural corrosion on opal phytoliths. *2° Int. Meet. on Phytolith Research, (Abstracts)*, : 73.
- Runge, F. 1998 d. *Bibliography of phytolith research*. Univ. of Paderborn, Geography. 74 p.
- Runge, J. & F. Runge. 1995. Late quaternary palaeoenvironmental conditions in eastern Zaire (Kivu) deduced from remote sensing, morphopedological and sedimentological studies (phytoliths, pollen, C-14). En: Le Thomas, A. & E. Roche (eds.), "2nd Symposium on African Palynology (Tervuren, March 6-10, 1995)." International Center for Training and Exchanges in the Geoscience (CIFEG), Occasional Publication 1995/31, : 109-122, Orleans, Frankreich.
- Runge, F. & J. Runge. 1996. Opal phytoliths in East African plants and soils. *1° Europ. Meet. on Phytolith Research (Abstracts)*, : 23.
- Runge, F. & J. Runge. 1997. Opal phytoliths in East African plants and soils. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 71-82, Madrid.

- Runge, F. & J. Runge. 1998. Phytolithanalytische und klimageschichtliche Untersuchungen im Musisi-Karashoma-Sumpf, Kahuzi-Biéga-Nationalpark, Ost-Kongo (ex. Zaire). En: Runge, J. (ed.), "Geowissenschaftliche Forschungen in Afrika, Festschrift zum 60." Geburtstag von Hans Karl Barth, Paderbomer Geographische Studien, 11 : 74-104.
- Ruprecht, F. 1866. Geobotanical investigations on chernozem. USSR, Academy of Science, Bull. S. Petersburg.
- Russ, J.C. & I. Rovner. 1987. Stereological verification of Zea phytolith taxonomy. *The Phytolitharian Newsletter*, 4 (3) : 10-18.
- Russ, J.C. & I. Rovner. 1989. Stereological identification of opal phytolith populations from wild and cultivated Zea. *American Antiquity*, 54 (4) : 784-792.
- Ryan, J.E. 1995. Recovery of identifiable phytoliths from groundstone artifacts and human dentition using Scanning Electron Microscopy. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 9 (1) : 7.
- Ryan, J.E. 1996 a. Silica phytolith key for the pioneer seed plants Chenopodium, Polygonium, Iva and Amaranthus. *Phytolith Research Symposium, 1996 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 9 (3) : 11.
- Ryan, J.E. 1996 b. Photographic recovery of diagnostic silica phytoliths from prehistoric groundstone artefacts & human dentition using Scanning Electron Microscopy. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 54.
- Ryan, J.E. 1996 c. A cry from the wilderness: Silica phytolith analysis of Dicotyledenous plants can enhance ethnobotanical analysis too. *The Phytolitharian Newsletter*, 10 (3) : 8-10.
- Ryan, J.E. 1998. A silica phytolith taxonomic key for the pioneer seed plants of North America. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 67.

S

- Sachs, J. 1860. Ergebnisse einiger neuerer Untersuchungen über die in Pflanzen enthaltene Kieselsäure. *Flora*.
- Saiki, T.H. & H. Harada. 1972. Observation of crystal and silica inclusion in parenchyma cells of certain tropical woods by scanning electron microscope. *Bull. Kyoto Univ. School of Forestry*, 44 : 194-205.
- Sakai, W.S. & M. Thom. 1979. Localization of silicon in specific cell wall layers of the stomatal apparatus of sugar cane by use of energy dispersive x-ray analysis. *Ann. Bot.*, 44 : 245-248.
- Salgado Labouriau, M.L. 1986. Estudio paleoecológico de la región de Rancho Grande, Venezuela. En: Huber, O. (ed.), "La selva nublada de Rancho Grande, Parque Nacional Henri Pittier, El ambiente físico, ecología vegetal y anatomía vegetal." : 109-130. Acta Científica Venezolana, Caracas.
- Sangster, A.G. 1968. Studies of opaline silica deposits in the leaf of Sieglingia decumbens (L.) Bernh. using the scanning electron microscope. *Ann. Bot.*, 32 (126) : 237-240.
- Sangster, A.G. 1970 a. Intracellular silica deposition in immature leaves in three species of the Gramineae. *Ann. Bot.*, 34 (134) : 245-257.
- Sangster, A.G. 1970 b. Intracellular silica deposition in mature and senescent leaves of Sieglingia decumbens (L.) Bernh. *Ann. Bot.*, 34 (136) : 557-570.
- Sangster, A.G. 1977 a. Characteristics of silica deposition in Digitaria sanguinalis (L.) Scop. (crabgrass). *Ann. Bot.*, 41 : 341-350.
- Sangster, A.G. 1977 b. Electron-probe microassay studies of silicon deposits in the roots of two species of Andropogon. *Can. J. Bot.*, 55 : 880-887.
- Sangster, A.G. 1978 a. The distribution of silicon deposits in the rhizomes of two Andropogon species. *Can. J. Bot.*, 56 : 148-156.
- Sangster, A.G. 1978 b. Electron-probe microassays for silicon in the roots of Sorghastrum nutans and Phragmites communis. *Can. J. Bot.*, 56 : 1074-1080.
- Sangster, A.G. 1978 c. Silicon in the roots of higher plants. *Amer. J. Bot.*, 65 (9) : 929-935.
- Sangster, A.G. 1983 a. Anatomical features and silica deposition patterns in the rhizomes of the grasses Sorghastrum nutans and Phragmites australis. *Can. J. Bot.*, 61 (3) : 752-761.
- Sangster, A.G. 1983 b. Silicon distribution in the nodal roots of the grass Miscanthus sacchariflorus. *Can. J. Bot.*, 61 : 1199-1205.
- Sangster, A.G. 1985. Silicon distribution and anatomy of the grass rhizome, with special reference to Miscanthus sacchariflorus (Macim.) Hackel. *Ann. Bot.*, 55 : 621-634.
- Sangster, A.G. & M.J. Hodson. 1986. Silica in higher plants. Silicon Biochemistry. *Ciba Foundation Symposium*, 121: 90-111, Wiley, Chichester, U.K.
- Sangster, A.G. & M.J. Hodson. 1992. Silica deposition in subterranean organs. En: Rapp, G. Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." Advances in Archaeological and Museum Science 1 : 239-251.
- Sangster, A.G. & M.J. Hodson. 1997 a. Botanical studies of silicon localization in cereal roots and shoots, including cryotechniques: a survey of work up to 1990. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 113-122, Madrid.
- Sangster, A.G. & M.J. Hodson. 1998. Silicon and aluminium codeposition in the cell wall phytoliths of Gymnosperm leaves. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 78.
- Sangster, A.G. & D.W. Parry. 1969. Some factors in relation to bulliform cell silification in the grass leaf. *Ann. Bot.*, 33 (130) : 315-323.
- Sangster, A.G. & D.W. Parry. 1971. Silica deposition in the grass leaf in relation to transpiration and the effect of Dinitrophenol. *Ann. Bot.*, 35 : 667-677.
- Sangster, A.G. & D.W. Parry. 1976 a. Endodermal silicon deposits and their linear distribution in developing roots of Sorghum bicolor (L.) Moench. *Ann. Bot.*, 40 : 361-371.
- Sangster, A.G. & D.W. Parry. 1976 b. Endodermal silicification in mature, nodal roots of Sorghum bicolor (L.) Moench. *Ann. Bot.*, 40 : 373-379.
- Sangster, A.G. & D.W. Parry. 1976 c. The ultrastructure and electron-probe microassay of silicon deposits in the endodermis of the roots of Sorghum bicolor (L.) Moench. *Ann. Bot.*, 40 : 447-459.
- Sangster, A.G. & D.W. Parry. 1981. Ultrastructure of silica deposits in higher plants. En: Simpson, T.L. & B.C. Volcani (eds.), "Silicon and Siliceous Structures in Biological Systems." : 383-407. Springer-Verlag, New York.

- Sangster, A.G.; Hodson, M.J. & D.W. Parry. 1983. Silicon deposition and anatomical studies in the inflorescence bracts of four *Phalaris* species with their possible relevance to carcinogenesis. *New Phytologist*, 93 (1) : 105-122.
- Sangster, A.G.; Williams, S.E. & M.J. Hodson. 1996. Silica deposition in the needles of the gymnosperms. II. Scanning electron microscopy and x-ray microanalysis. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 33.
- Sangster, A.G.; Williams, S.E. & M.J. Hodson. 1997. Silica deposition in the needles of the gymnosperms. II. Scanning electron microscopy and x-ray microanalysis. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4: 135-146, Madrid.
- Sangster, A.G.; Hodson, M.J.; Parry, D.W. & J.A. Rees. 1983. A developmental study of silicification in the trichomes and associated epidermal structures of the inflorescence bracts of the grass *Phalaris canariensis* L. *Ann. Bot.*, 52: 171-187.
- Sase, T. 1980. Plant opal analysis of buried soils immediately beneath the Nanbu pumice layer. *Quaternary Research*, 19 (2) : 117-124.
- Sase, T. 1981. Analytical study of plant opal in the buried soil immediately beneath the Hachinohe pumice bed. *Quaternary Research*, 20 (1) : 15-20.
- Sase, T. 1986 a. Plant opal analysis of aridisols in North Island, New Zealand. *Pedologist*, 30 (1) : 2-12.
- Sase, T. 1986 b. Opal phytolith analysis of volcanic ash soils from recent Towada ashes. *Pedologist*, 30 (2) : 102-114.
- Sase, T.; & M. Hosono. 1998. Phytolith record in soils interstratified with Late Quaternary tephra overlying the region east of Towada volcano, Japan. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 34.
- Sase, T. & Y. Kato. 1976 a. The study on phytogenic particles, especially, on plant opals, in humic horizons of present and buried volcanic ash soils. I. The problem on the source of plant opals. *Quaternary Research*, 15 (1) : 21- 33.
- Sase, T. & Y. Kato. 1976 b. The study on phytogenic particles, especially, on plant opals, in humic horizons of present and buried volcanic ash soils. I. The problem on the origin of humus in volcanic ash soils and the assumption of paleoclimate by plant opals. *Quaternary Research*, 15 (2) : 66-74.
- Sase, T. & R. Kondo. 1974. The study of opal phytoliths in the humus horizon of buried volcanic ash soils in Hokkaido. *Research Bulletin of Obihiro Zootechnical University*, 8 (3) : 465-483.
- Sase, T.; Kato, Y. & S. Makino. 1985. Plant opal analysis of volcanic ash soils at the foot of Mt. Fuji and Mt. Amagi. *Pedologist*, 29 (1) : 44-59.
- Sase, T.; Kondo, R. & K. Inoue. 1990. Vegetational environments of volcanic ash soils developed at the foot of Mt. Iwate during the last 13,000 yrs., with special reference to opal phytolith analysis. *Pedologia*, 34 (1) : 15-30.
- Sase, T.; Hosono, M.; Utsugawa, T. & K. Aoki. 1988. Opal phytolith analysis of present and buried volcanic ash soils at Te Ngae Road tephra section, Rotorua basin, North Island, New Zealand-soil-vegetation relationship for the last 20,000 years. *Quaternary Research*, 27 (3) : 153-164.
- Sase, T.; Hosono, M.; Utsugawa, T.; Kato, S. & M. Komamura. 1987. Opal phytolith analysis of the Kanto Loam Formation in Musashino Upland, Kanto Plain, Japan. *Quaternary Research*, 26 (1) : 1-11.
- Schall, W.M. 1943. An investigation of the presence of siliceous rods in the secondary wall of woody tissue. *Madrona*, 7 (1) : 8-14.
- Schellenberg, H.C. 1908. The remains of plants from the North Kurgan, Anau. En: Pumpelly, R. (ed.), "Explorations in Turkestan 2." : 271-474. Carnegie Institute, Washington D.C.
- Schreve-Brinkman, E.J. 1978. A palynological study of the Upper Quaternary sequence in the El Abra corridor and rock shelters (Colombia). *Palaeogeography, Palaeoclimatology, Palaeoecology*, 25 : 1-109.
- Schuyler, A.E. 1971. Scanning electron microscopy of achene epidermis in species of *Scirpus* (Cyperaceae) and related genera. *Proceedings of the Academy of Natural Sciences*, 123 : 29-52, Philadelphia.
- Schwarz, D.; Mariotti, A.; Lanfranchi, R. & B. Guillet. 1986. $^{13}\text{C}/^{12}\text{C}$ ratios of soil organic matter as indicators of vegetation changes in the Congo. *Geoderma*, 39 : 97-103.
- Scurfield, G.; Anderson, C.A. & E.R. Segnit. 1974 a. Silica in woody stems. *Aust. J. Bot.*, 22 : 211-231.
- Scurfield, G.; Anderson, C.A. & E.R. Segnit. 1974 b. Silicification of wood. Scanning electron microscopy Part 2: 389-396. I.T.T. *Research Institute, Chicago*.
- Scurfield, G.; Michell, A.J. & S.R. Silca. 1973. Crystals in woody stems. *Botanical Journal of the Linnean Society*, 66 : 277-289.
- Scurfield, G.; Segnit, E.R. & C.A. Anderson. 1974. Silicification of wood. *Proceedings of the Scanning Electron Microscope Conference*, 1974 : 389-396.
- Segnit, E.R.; Stevens, T.J. & J.B. Jones. 1965. The role of water in opal. *Journal Geological Society Australia*, 12 : 211-226.
- Seidemann, J. 1966. *Stärke-Atlas - Grundlagen der Stärke-Mikroskopie und Beschreibung der wichtigsten Stärkearten*. Paul Parey, Berlin, Hamburg.
- Sendlusky, T. & L.G. Labouriau. 1966. Corpos silicosos da gramíneas dos Cerrados. I. *An. da Acad. Brasileira de Ciências*, 38 -supl.- : 159-170.
- Shafer, H.J. & R.G. Holloway. 1979. Organic residue analysis in determining stone tool function. En: Hayden, B. (ed.), "Lithic use-wear analysis." : 385-399. Academic Press, New York.
- Shamshuddin, J. & E. Tessens. 1983. Some T₂ terrace soils of Peninsular Malaysia: I. Micromorphology, genesis and classification. *Pertanika*, 6 (3) : 61-39.
- Sharma, B.C. 1942. Development anatomy of the shoot of *Zea mays* L. *Ann. Bot.*, 6 : 245-282.
- Sharma, M. & K.R. Rao. 1970. Investigations on the occurrence of silica in Indian timbers. *Indian Forester*, 96 : 740-754.
- Sharma, O. P. 1972. Anatomy of *Scirpus squarrosus*. *Current Science*, 41 (13) : 494-497.
- Sharp, R.B. 1962. Plant silica: An abrasive constituent of plant matter? *Journal of Agricultural Engineering Research*, 7: 214-220.
- Shaw, R.B. & F.E. Smeins. 1979. Epidermal characteristics of the callus in *Eriochloa* (Poaceae). *Amer. J. Bot.*, 66 (8) : 907-913.
- Shaw, R.B. & F.E. Smeins. 1981. Some anatomical and morphological characteristics of the North American species of *Eriochloa* (Poaceae: Paniceae). *Bot. Gaz.*, 142 (2) : 534-544.

- Shemesh, A.; Burkle, L.H. & J.D. Hays. 1995. Late Pleistocene oxygen isotope records of biogenic silica from the Atlantic sector of the Southern Ocean. *Paleoceanography*, 10 (2) : 179-196.
- Shemesh, A.; Charles, C.D. & R.G. Fairbanks. 1992. Oxygen isotopes in biogenic silica: Global changes in Ocean temperature and isotopic composition. *Science*, 256 : 1434-1436.
- Shishlina, N. & A.A. Golyeva. 1998. Archaeology, phytoliths and paleoecological reconstructions. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 60.
- Shoji, S. & J.I. Masui. 1971. Opaline silica of recent volcanic ash soils in Japan. *Soil Science and Plant Nutrition*, 22: 101-108.
- Shone, M.G.T. 1964. Initial uptake of silica by excised barley roots. *Nature*, 202 (4929) : 314-315.
- Siever, R. 1957. The silica budget in the sedimentary cycle. *American Mineralogist*, 42 : 821-841.
- Simkiss, K. & K.M. Wilbur. 1989. Plant mineralization - Ions, silicification, and the transpiration stream. En: Simkiss, K. & K.M. Wilbur (eds.), "Biomining: Cell Biology and Mineral Deposition.", 106-130. Academic Press, New York.
- Simmonds, D.H.; St. Clair, M.S. & J.D. Collins. 1970. Surface structure of wheat and its contribution to the dust problem. *Cereal Science Today*, 15 : 230-234.
- Simpson, T.L. & B.E. Volcani (eds.). 1981. *Silicon and siliceous structures in biological systems*. Springer-Verlag, New York.
- Singh, V. & P.C. Pande. 1977. A study of leaf epidermal structures in some Scitamineae. *Geobios*, 4 : 18-20.
- Sitholey, R.V. 1971. Observations on the three-dimensional structure of the leaf cuticle in certain plants. *Ann. Bot.*, 35: 637-639.
- Smiley, C. & L.M. Huggins. 1981. *Pseudofagus idahoensis* N. Gen. et Sp. (Fagaceae) from the Miocene Clarkia flora of Idaho. *Amer. J. Bot.*, 68 (6) : 741-761.
- Smith, F.A. 1998. Characterization of organic material in phytoliths from a C₃ and a C₄ grass. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 72.
- Smith, M.B. & W.V. Brown. 1973. The kranz syndrome in the Gramineae as indicators by carbon isotope ratios. *Amer. J. Bot.*, 60 : 505-513.
- Smith, M.B.; Kaplan, L. & E.A. Davis. 1986. Biogenic silica: Phytolith formation in maize tissue culture. En: Rovner, I. (ed.), "Plant Opal Phytolith Analysis in Archaeology and Paleocology." Occasional Papers of The Phytolitharien N°1, Proceedings of the 1984 Phytolith Research Workshop, : 141-147. Raleigh, North Carolina State University.
- Smith, P.M. 1973. Observations on some critical bromegrass. *Watsonia*, 9 (4) : 319-332.
- Smith, R.M. & P.C. Twiss. 1966. Extensive gaging of dust deposition rates. *Transac. Kansas Acad. Sci.*, 68 : 311-321.
- Smith, R.M.; Twiss, P.C.; Krauss, R.K. & M.J. Brown. 1970. Dust deposition in relation to site, season and climate variables. *Amer. Soc. Soil Sci., Proc.*, 34 (1) : 112-117.
- Smithson, F. 1953. The micro-mineralogy of North Wales soils. *Jour. Soil Sci.*, 4 : 194-210.
- Smithson, F. 1954. The rocks and soils of North Wales. *Transac. Angelesey Antiq. Soc.*, : 1-19.
- Smithson, F. 1956 a. Silica particles in some British soils. *Jour. Soil Sci.*, 7 (1) : 122-129.
- Smithson, F. 1956 b. Plant opal in soil. *Nature*, 178 : 107.
- Smithson, F. 1958. Grass opal in British soils. *Jour. Soil Sci.*, 9 (1) : 148-154.
- Smithson, F. 1959. Opal sponge spicules in soils. *Jour. Soil Sci.*, 10 (1) : 105-109.
- Smithson, F. 1961. The microscopy of the silt fraction. *Jour. Soil Sci.*, 12 (1) : 145-157.
- Soderstrom, T.R. 1982. *Cryptochloa dressleri* (Poaceae), a new Bambusoid grass from Panama. *Brittonia*, 34 (1) : 25-29.
- Soderstrom, T.R.; Hilu, K.W.; Campbell, C.S. & M.E. Barkworth. (eds.). 1987. *Grass systematics and evolution*. Smithsonian Institution Press, Washington D.C.
- Solla, R.L. 1884. Sui cristalli di silice in serie periferici nelle Palme. *Nuovo Giornale Bot. Ital.*, 16 : 50-56.
- Sondahl, M.R. & L.G. Labouirau. 1970. Corpus silicosos de gramineas dos Cerrados. IV. *Pesq. Agropec. Bras.*, 5 : 183-207.
- Soni, S.L. & D.W. Parry. 1973. Electron probe microanalysis of silicon deposition in the inflorescence bracts of the rice plant (*Oryza sativa*). *Amer. J. Bot.*, 60 (2) : 111-116.
- Soni, S.L.; Kaufman, P.B. & W.C. Bigelow. 1970. Electron microprobe analysis of the distribution of silicon in leaf epidermal cells of the oat plant. *Phytomorphology*, 20 : 350-363.
- Soni, S.L.; Kaufman, P.B. & W.C. Bigelow. 1972 a. Electron probe analysis of silicon and other elements in leaf epidermal cells of the rice plant (*Oryza sativa* L.). *Amer. J. Bot.*, 59 : 38-42.
- Soni, S.L.; Kaufman, P.B. & W.C. Bigelow. 1972 b. Electron microprobe analysis of silicon and other elements in developing silica cells of the leaf and internode of *Cyperus alternifolius*. *Ann. Bot.*, 36 : 611-619.
- Soni, S.L.; Kaufman, P.B. & W.C. Bigelow. 1972 c. Electron microprobe analysis of silica cells in leaf epidermal cells of *Cyperus alternifolius*. *Plant and Soil*, 36 : 121-128.
- Soni, S.L.; Kaufman, P.B. & W.C. Bigelow. 1972 d. Regulation of silicon deposition in *Avena* internodal epidermis by gibberellic acid and sucrose. *Jour. Experimental Botany*, 23 (76) : 787-791.
- Soni, S.L.; Kaufman, P.B. & R.A. Jones. 1972. Electron microprobe analysis of the distribution of silicon and other elements in rice leaf epidermis. *Bot. Gaz.*, 133 : 66-72.
- Southwell, C.R. & J.D. Bultman. 1971. Marine borer resistance of untreated woods over long periods of immersion in tropical waters. *Biotropica*, 3: 81-107.
- Sowers, A.E. & E.L. Thurston. 1979. Ultrastructural evidence for uptake of silicon containing silicic acid analogs by *Urtica pilulifera* and incorporation into cell wall silica. *Protoplasma*, 101 : 11-22.
- Spencer, C. P. 1983. Marine biogeochemistry of silicon. En: Aston, S.R. (ed.), "Silicon Geochemistry and Biochemistry." : 101-141. Academic Press, London, New York.
- Srinivasan, J.; Dayanandan, P. & P.B. Kaufman. 1979. Silica distribution in *Equisetum hyemale* var *affine* L. (Engelm) in relation to the negative geotropic response. *New Phytologist*, 83 : 623-626.
- Srivastava, A.K. 1978. Study of leaf epidermis in the genus *Digitaria* Rich. Gramineae. *Journal of the Indian Botanical Society*, 57 : 155-160.

- Srivastava, S.K. & P.L. Binda. 1984. Siliceous and silicified microfossils from the Maastrichtian battle Formation of Southern Alberta, Canada. *Paléobiologie continentale, Montpellier 1984*, 14 (1) : 1-24, 15 pl.
- Stählin, A. & H. Tirtapradja. 1971. Über die Aufnahme und Einlagerung von Silizium in Futtergräsern. *Zeitschrift für Acker und Pflanzenbau*, 134 : 295-312.
- Stant, M.Y. 1973. Scanning electron microscopy of silica bodies and other epidermal features in Gibasis (*Tradescantia*) leaf. *Botanical Journal of the Linnean Society*, 66 : 233-244.
- Starna, W.A. & D.A. Kane, Jr. 1983. Phytoliths, archaeology and caveats: A case study from New York. *Man in the Northeast*, 26 : 21-32.
- Stephan, S. 1973. Ansammlungen von biogenem Opal im A₂-Horizont eines Planosols. *Zeitschrift für Pflanzenernährung und Bodenkunde*, 136 (2) : 97-192.
- Sterling, C. 1947. Sclereid formation in the shoot of *Pseudotsuga taxifolia* Amer. J. Bot., 34 : 45-52.
- Sterling, C. 1967. Crystalline silica in plants. Amer. J. Bot., 54 (7) : 840-844.
- Stewart, D.R.M. 1965. The epidermal characters of grasses, with special reference to East African plain species. *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie*, 84 (1) : 63-116; (2) : 117-174.
- Sticher, H. & R. Bach. 1965. Kieselsäure und Pflanze. *Schweizerische Landwirtschaftliche Forschung*, 4 : 352-359.
- Stone, P.A. 1994. The "sawgrass" bomb: an explosive lesson on some hazards of bleach digestions. *The Phytolitharien Newsletter*, 8 (3) : 3-4.
- Strählin, A. & H. Tirtapradja. 1971. Über die Aufnahme und Einlagerung von Silizium in Futtergräsern. *Zeitschrift für Acker und Pflanzenbau*, 134 (4) : 295-312.
- Sugiyama, S. 1998. Phytolith studies on lucidophyllous forest development since the last glacial in Southern Kyushu, Japan. 2° Int. Meet. on Phytolith Research, (Abstracts), : 35.
- Sugiyama, S. & T. Soda. 1998. Phytological study on the Early Paleolithic culture in Takamori site, Northeast Japan. The relation between the change of bambusoideae and the glacial-interglacial cycle. 2° Int. Meet. on Phytolith Research, (Abstracts), : 26.
- Sustar, F. 1976. The chorology and taxonomy of the complex *Brachypodium pinnatum* in Slovenia. *Biološki Vestnik*, 24 : 1-11.
- Suzuki, H. 1937. Studies on the relations between the anatomical characters of the rice plant and its susceptibility to blast disease. Tokyo Imperial University, College of Agriculture Journal, 14 : 181-264.
- Swenson, C.F.; Le Tourneau, D. & L.C. Erickson. 1964. Silica in Medusahead. *Weeds*, 12 : 16-18.
- Swineford, A. & P.C. Franks. 1959. Opal in the Ogalla Formation in Kansas. En: Ireland, H.A. (ed.), "Silica in sediments, A Symposium with discussion." Special publ., 7 : 111-120. Soc. Econ. Paleont. and Miner.
- Sz-Borsos, O. 1974. Notes on the leaf anatomy of the *Brachypodium pinnatum* species complex. *Botanica Academiae Scientiarum Hungaricae, Acta*, 20 (1-2) : 13-21.

T

- Tack, M. & L. Kaplan. 1986. Phytoliths analysis as corroborative physical findings. En: Rovner, I. (ed.), "Plant Opal Phytolith Analysis in Archeology and Paleoecology." Occasional Papers N°1 of The Phytolitharien : 129-132. Raleigh, North Carolina State University.
- Takahashi, E. 1961. Effect of silicon on the growth of barley, tomato, radish, green onion, chinese cabbage and their nutrients uptake. *Journal of the Sci. of Soil and Manure*, 32 : 623-626.
- Takahashi, E. 1974. *Comparative plant nutrition*. Yokendo Publishers, Tokyo.
- Takahashi, E. & Y. Miyake. 1977. Silica and plant growth. Proc. Intern. Sem. Environm. and Fertility Management in Intensive Agric. Tokyo, Jap. Soc. Soil Sci. Plant Nutr., 145 : 603-611.
- Takahashi, E.; Tanaka, T. & Y. Miyake. 1981. Distribution of silica accumulator plants in the plant kingdom (6). Commelinales, Cyperales, and some dicotyledoneae families (Cucurbitaceae and Urticaceae). *Japanese Journal of Soil Science and Plant Nutrition*, 52 : 511-515.
- Takeoka, Y. 1963. Notes on some grasses. XIII. *Bot. Gaz.*, 124 : 264-270.
- Takeoka, Y.; Inique, S. & S. Kawano. 1959. Notes on some grasses. IX. Systematic significance of bicellular microhairs of leaf epidermis. *Bot. Gaz.*, 120 : 80-91.
- Takeoka, Y.; Kaufman, P.B. & O. Matsumura. 1979. Comparative microscopy of idioblasts in lemma epidermis of some C₄ and C₃ grasses (Poaceae) using sump method. *Phytomorphology*, 29 (3-4) : 330-337.
- Takeoka, Y.; Kondo, K. & P.B. Kaufman. 1983. Leaf surface fine-structures in rice plants cultured under shaded and non-shaded conditions. Proceedings of the Crop Science Society of Japan, *Japanese Journal of Crop Science*, 52 (4) : 534-543.
- Takeoka, Y.; Matsumura, O. & P.B. Kaufman. 1983. Studies on silicification of epidermal tissues of grasses as investigated by soft x-ray image analysis. I. On the method to detect and calculate frequency of silica bodies in bulliform cells. Proceeding of the Crop Science Society of Japan, *Japanese Journal of Crop Science*, 52 (4) : 544-550.
- Takeoka, Y.; Wada, T.; Naito, K. & P.B. Kaufman. 1984. Studies on silicification of epidermal tissues of grasses as investigated by soft x-ray image analysis. II. Differences in frequency of silica bodies in bulliform cells at different positions in the leaves of rice plants. Proceedings of the Crop Science Society of Japan, *Japanese Journal of Crop Science*, 53 (2) : 197-203.
- Tallent, R.C. & D.E. Wujek. 1983. Scanning electron microscopy as an aid to taxonomy of sedges (Cyperaceae: *Carex*). *Micron and Microscopica, Acta*, 14 : 271-272.
- Tan, D.R. & R. Huang. 1993. Phytolith research and its application in ancient ceramic-mould ware of China. *Archaeology*, 5 : 469-474.
- Targulian, V.O. & A.A. Golyeva. 1998. Soil memory: Biota induced beares of memory. 2° Int. Meet. on Phytolith Research, (Abstracts), : 80.
- Tatsuhara, A. & Y. Fujimaki. 1987. Food habit analysis by using opal phytoliths in Cervus-nippon- yesoensis. *Research Bulletin of Obihiro University, Series 1*, 15 (2) : 85-90.
- Taugourdeau-Lantz, J.; Laroche, J.; Lachkar, G. & D. Pons. 1976. La silice chez les vegetaux: Probleme des Phytolithaires (I). *Travaux du Laboratoire de Micropaléontologie*, 5 : 255-303. Université Pierre-et-Marie-Curie, Paris.
- Tecchi, R.A. 1983 a. Contenido de silicofitolitos en suelos del sector sudoriental de la Pampa Ondulada. *Ciencia del Suelo*, 1 (1) : 75-82.

- Tecchi, R.A. 1983 b. Distribución de silicofitolitos en dos perfiles de suelo de la Pampa Ondulada. *Ciencia del Suelo*, 1 (2) : 93-95.
- Teixeira da Silva, S. & L.G. Labouriau. 1970. Corpos silicosos de gramíneas dos Cerrados. III. Pesq. Agropec. Bras., 5 : 167-182.
- Terrell, E.E. & W.P. Wergin. 1979. Scanning electron microscopy and energy dispersive x-ray analysis of leaf epidermis in *Zizania* (Gramineae). *Scanning Electron Microscopy*, 3 : 81-88.
- Terrell, E.E. & W.P. Wergin. 1981. Epidermal features and silica deposition in lemmas and awns of *Zizania* (Gramineae). *Amer. J. Bot.*, 68 (5) : 697-707.
- Teruggi, M. 1955. Algunas observaciones microscópicas sobre vidrio volcánico y ópalo organógeno en sedimentos pampeanos. *Notas del Museo de La Plata -geología*, 66 : 17-26.
- Teruggi, M. 1984. *Diccionario sedimentológico. Vol. II: Rocas aclásticas y suelos*. Ed. Cient. Arg. LIBRAT (ECAL), Buenos Aires. 236 p.
- Ter Welle, B.J.H. 1976 a. On the occurrence of silica grains in the secondary xylem of the Chrysobalanaceae. *IAWA Bull.*, 1976 (2) : 19-29.
- Ter Welle, B.J.H. 1976 b. Silica grains in woody plants of the neotropics, especially Surinam. En: Baas, P.; Bolton, A.J. & D.M. Catling. (eds.), "Wood Structure in Biological and Technological Research." *Leiden Botanical Series* 3 : 107-142. Leiden, University Press.
- Ter Welle, B.J.H. 1980. Cystoliths in the secondary xylem of *Sparattanthelium* (Hernandiaceae). *IAWA Bull.*, 1 : 43-48.
- Theobald, W.L.; Krahulik, J.L. & R.C. Rollins. 1979. Trichome description and classification. En: Metcalfe, C.R. & L. Chalk (eds.), "Anatomy of the Dicotyledons." : 40-53. 2nd edition, Clarendon Press, London.
- Thomasson, J.R. 1978 a. Epidermal patterns of the lemma in some fossil and living grasses and their phylogenetic significance. *Science*, 199 : 975-977.
- Thomasson, J.R. 1978 b. Clearing, cuticle removal, and staining for the fertile bracts (lemmas and paleas) of grass Anthecia. *Stain Technology*, 53 : 233-236.
- Thomasson, J.R. 1980 a. *Archaeoleersia nebraskensis* gen. et sp. nov. (Gramineae-Oryzaceae), a new fossil grass from the Late Tertiary of Nebraska. *Amer. J. Bot.*, 67 : 876-882.
- Thomasson, J.R. 1980 b. *Paleoriocoma* (Gramineae, Stipeae) from the Miocene of Nebraska: Taxonomic and phylogenetic significance. *Syst. Bot.*, 5 : 233-240.
- Thomasson, J.R. 1981. Micromorphology of the lemma in *Stipa robusta* and *Stipa viridula* (Gramineae; Stipeae): Taxonomic significance. *The Southwest Naturalist*, 26 : 211-214.
- Thomasson, J. R. 1983. *Carex gracii* sp.n., *Cyperocarpus eliasii* sp.n., *Cyperocarpus terrestris* sp.n. and *Cyperocarpus pulcherrima* sp.n. (Cyperaceae) from the Miocene of Nebraska. *Amer. J. Bot.*, 70 (3) : 435-449.
- Thomasson, J.R. 1984. Miocene grass (Gramineae: Arundinoideae) leaves showing external micromorphological and internal anatomical features. *Bot. Gaz.*, 145 (2) : 204-209.
- Thomasson, J.R.; Nelson, M.E. & R.J. Zakrzewski. 1986. A fossil grass (Gramineae: Chloridoideae) from the Miocene with Kranz anatomy. *Science*, 233 (4766) : 876-878.
- Thompson, J.B. 1996. The excavation of Khok Phanom Di, a prehistoric site in central Thailand. En: "Subsistence and Environment: The botanical evidence. Vol. IV. The Biological Remains, Part 2." Report on the Research Committee of the Society of Antiquaries of London, LIII, Society of Antiquaries of London.
- Thompson, R.G. 1989. Phytolith analysis of food residues in utilized ceramics: a tool for tracing paleodiet. *Midcontinent Journal of Archaeology*, 15 (1) : 155.
- Thompson, R.G. 1995. A functional study of Brainerdware Pottery through phytoliths recovered from food residues. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 9 (1) : 5.
- Thompson, R.G. 1996. Maize phytolith from food residues at La Emererenciana, Ecuador. *Phytolith Research Symposium, 1996 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 9 (3) : 11-12.
- Thompson, R.G. 1998. A new model for tracing the origins of maize. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 61.
- Thompson, R.G. & A.U. Dogan. 1987. Scanning electron-microscopy study of opal phytoliths recovered from the residues in utilized ceramics. *Journal of Electron Microscopy Technique*, 7 (2) : 146.
- Thompson, R.G. & S.C. Mulholland. 1994 a. Opal phytolith analysis provides a method for tracing the use of pottery vessels to prepare corn. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolitharian Newsletter*, 8 (2) : 6.
- Thompson, R.G. & S.C. Mulholland. 1994 b. Identification of corn in food residues on utilized ceramics at the Shea Site (32CS101). *The Phytolitharian Newsletter*, 8 (2) : 7-11.
- Thomson, M.C. & G. Rapp, Jr. 1989. Paleobotany from phytoliths. En: Herzog, Z.; Rapp, G. Jr. & O. Negbi (eds.): "Excavations at Tel Michal, Israel." : 223-225. University of Minnesota, Minneapolis.
- Thurston, E.L. 1974. Morphology, fine structure, and ontogeny of the stinging emergence of *Urtica dioica*. *Amer. J. Bot.*, 61 : 809-817.
- Tieszen, L.L. 1978. Carbon isotope fractionation in biological material. *Nature*, 276 : 97-98.
- Tieszen, L.L.; Hein, D.; Qvortrup, S.A.; Troughton, J.H. & S.K. Imbamba. 1979. Use of $\delta^{13}C$ values to determine vegetation selectivity in East African herbivores. *Oecologia*, 37 (3) : 351-359.
- Tieszen, L.L.; Senyimba, M.M.; Imbamba, S.K. & J.H. Troughton. 1979. The distribution of C₃ and C₄ grasses and carbon isotope discrimination along an altitudinal and moisture gradient in Kenya. *Oecologia*, 37 (3) : 337-350.
- Tingvall, C. & U. Miller. 1996. Phytolith studies of selected cereals and other grasses. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 34.
- Tingvall, C. & U. Miller. 1997. Phytolith studies of selected cereals and other grasses. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 175-180, Madrid.
- Toivonen, H. & T. Timonen. 1976. Perigynium and achene epidermis in some species of *Carex* subg. *vigneae* (Cyperaceae), studied by scanning electron microscopy. *Annals Botanici Fennici*, 13 : 49-59.
- Tomlinson, P.B. 1956. Studies in the systematic anatomy of the Zingiberaceae. *Jour. Linn. Soc. (Bot.)*, 55 : 543-592.
- Tomlinson, P.B. 1959. An anatomical approach to the classification of Musaceae. *Jour. Linn. Soc. (Bot.)*, 55 : 779-809.

- Tomlinson, P.B. 1960. The anatomy of *Phenakosporum* (Musaceae). *Jour. Arnold. Arbor.*, 41 : 287-297.
- Tomlinson, P.B. 1961 a. *Anatomy of the Monocotyledons. II. Palmae*. Clarendon Press, Oxford. 453 p.
- Tomlinson, P.B. 1961 b. Morphological and anatomical characteristics of the Marantaceae. *Jour. Linn. Soc. (Bot.)*, 58 : 55-78.
- Tomlinson, P.B. 1961 c. The anatomy of *Canna*. *Jour. Linn. Soc. (Bot.)*, 56 : 467-473.
- Tomlinson, P.B. 1969. Anatomy of the Monocotyledons. III. Commelinales - Zingiberales. Oxford University Press, London.
- Toth, S.J. 1939. The simulating effects of silicates on plant yields in relation to anion displacement. *Soil Sci.*, 47 (2) : 123-141.
- Tsutsuki, K.; Kondo, R.; Shiraishi, H. & S. Kuwatsuka. 1993. Composition of lignin-degradation products, lipids and opal phytoliths in a peat profile accumulated since 32,000 years B.P. in central Japan. *Soil Science and Plant Nutrition*, 39 (3) : 463-474.
- Tubb, H.J.; Hodson, M.J. & G.C. Hodson. 1993. The inflorescence papillae of the Triticeae: a new tool for taxonomic and archaeocological research. *Ann. Bot.*, 72 : 537-545.
- Türpe, A.M. 1966. Histotaxonomía de las especies argentinas del género *Paspalum*. *Lilloa*, 32 : 35-300.
- Türpe, A.M. 1973. Anatomía foliar en *Aegopogon* (con especial referencia a la morfología de *Aegopogon bryophilus* Doell.) Eragrostoideae - Zoysieae. *Lilloa*, 33 (12) : 261-280.
- Türpe, A.M. 1977. Anatomía foliar de las especies argentinas del género *Brachiaria*. *Lilloa*, 34 (13) : 187-207.
- Türpe, A.M. 1981. Anatomía foliar de las especies de *Elyonurus* Willd (Andropogoneae: Andropogonoideae: Gramineae). *Lilloa*, 35 (3) : 5-35.
- Twiss, P.C. 1980. Opal phytoliths as indicators in C₃ and C₄ grasses. *Geological Society of America, Abstracts with Programs*, 12 (1) : 17.
- Twiss, P.C. 1983. Dust deposition and opal phytoliths in the Great Plains. *Nebraska Acad. Sci., Transactions*, 7 : 73-82.
- Twiss, P.C. 1985. Opal phytolith as indicators of climate in deep sea sediments. *2nd Phytolith Conference (Abstracts), Duluth, The Phytolitharian Newsletter*, 3 (3) : 8-9.
- Twiss, P.C. 1986. Morphology of opal phytoliths in C₃ and C₄ Grasses. En: Rovner, I. (ed.), "Plant Opal Phytolith Analysis in Archaeology and Paleoecology." Occasional Papers N°1 of The Phytolitharian : 4-11. Raleigh, North Carolina State University.
- Twiss, P.C. 1987. Grass-opal phytoliths as climatic indicators of the Great Plains Pleistocene. En: Johnson, W.C. (ed.), "Quaternary Environments of Kansas." Kansas Geological Survey Guidebook Series, 5 : 179-188.
- Twiss, P.C. 1992. Predicted world distribution of C₃ and C₄ grass phytoliths. En: Rapp, G. Jr. & S.C. Mulholland (eds.), "Phytolith Systematics. Emerging Issues." Advances in Archaeological and Museum Science 1: 113-128.
- Twiss, P.C. 1998. A Cumudgeon's view of grass phytolithology. *2^o Int. Meet. on Phytolith Research, (Abstracts)*, : 22.
- Twiss, P.C.; Smith, R.M. & R.K. Krauss. 1968. Composition of phytolith from *Andropogon scoparius*. *Geological Society of America, Special papers*, 115 : 225.
- Twiss, P.C.; Suess, E. & R.M. Smith. 1969. Morphology classification of grass phytoliths. *Amer. Soc. Soil Sci., Proc.*, 33 (1) : 109-115.
- Tyree, E.L. 1992. Notes on calcium phytoliths and sclereids in olive. *The Phytolitharian Newsletter*, 7 (2) : 10.
- Tyree, E.L. 1993. Acetone pretreatment for non-acid digestion of olive fruits and oil sediments. *The Phytolitharian Newsletter*, 8 (1) : 56.
- Tyree, E.L. 1994. Phytolith analysis of olive oil and wine sediments for possible identification in archaeology. *Can. J. Bot.*, 72 (4) : 499-504.
- Tyurin, I.V. 1937. On the biological accumulation of silica in soils. *Problems of Soviet Soil Science*, 4 : 3-23.
- Tzvelev, N.N. 1989. The system of grasses (Poaceae) and their evolution. *Bot. Rev.*, 55 : 143-203.

U

- Uber, F.M. 1940. Microincineration and ash analysis. *Amer. Soc. Hort. Sci., Proc.*, 6 : 204-226.
- Uhl, N.W. 1976 a. Developmental studies in *Ptychosperma* (Palmae). I. The inflorescence and the flower cluster. *Amer. J. Bot.*, 63 : 82-96.
- Uhl, N.W. 1976 b. Developmental studies in *Ptychosperma* (Palmae). II. The staminate and pistillate flowers. *Amer. J. Bot.*, 63 : 97-109.
- Umemoto, K. 1973. Mode of morphological forms of crystalline inorganic component in plants: Silicon bodies in wheat. *Chemical and Pharmaceutical Bulletin*, 21 : 1391-1393.
- Umemoto, K. 1973. Chemical composition of crystalline inorganic components existing in plant tissues. *Yakugaku Zasshi*, 94 : 380-386.
- Umemoto, K. & K. Hozumi. 1971 a. A pharmacognostical application of low-temperature ashing: Microscopic observations on the mineral structure of "San-zhu-ye" and its related species of Gramineae. *Chemical and Pharmaceutical Bulletin*, 19 : 217-218.
- Umemoto, K. & K. Hozumi. 1971 b. Application of low-temperature ashing with high frequency oxygen plasma in pharmacognostical studies; observations of silicon bodies in ashed tissues of leaves of *Bambusa multiplex* Raeuschel and stems of *Equisetum hyemale* Linn. and *Equisetum ramosissimum* Desf. var. *japonicum* Milde. *Yakugaku Zasshi*, 91 (8) : 850-854.
- Umlauf, M. 1989. Occurrence of unusual short cell types in tropical grasses. *Phytolith Basic Research Project, Technical Paper N° 1, Columbia, University of Missouri*.
- Umlauf, M. 1993. Phytoliths evidence for initial period maize at Cardal, Central Coast of Peru. En: Pearsall, D.M. & D.R. Piperno (eds.), "Current Research in Phytolith Analysis: Applications in Archaeology and Paleoecology." Museum Applied Science Center for Archaeology (MASCA) Research Papers in Science and Archaeology 10 : 125-130. University of Pennsylvania, Philadelphia.
- Umemoto, K. 1973. Mode of morphological forms of crystalline inorganic component in plants: silicon bodies in wheat. *Chem. Pharmac. Bull.*, 21: 1391-1393.
- Unger, F. 1849. Mikroskopische untersuchung des atmosphärischen staubes von gratz. *Sitzungber d.k. Akad. d. Wissensch.*
- Uphof, J.C.T. 1962. Plant Hairs. En: Zimmermann, W. & P.G. Ozenda (eds.), "Handbuch der Pflanzenanatomie." 2. Aufl., Bd. IV, Teil 5, : 1-49. Gebrüder Borntraeger, Berlin.
- Usov, N.I. 1943. Biological accumulations of silica in soils. *Pochvovedenie*, 9-10 : 30-36.

V

- Vanderberghe, N. 1976. Phytoclasts as provenance indicators in the Belgian Septaria clay of Boon (Rupelian age). *Sedimentology*, 23 (1) : 141-145.
- Van Der Worm, P.D.J. 1980. Uptake of Si by five plant species, as influenced by variations in Si-supply. *Plant and Soil*, 56 : 153-156.
- Van Rumelen, F.F. 1953. The mineralogical importance of organic SiO₂ in soil. *Landbouw*, 25 : 225-230.
- Van Vliet, G.J.C.M. 1976. Wood anatomy of Rhizophoraceae. "Wood Structure in Biological and Technological Research." *Leiden Botanical Series*, 3 : 20-75. Leiden, University Press.
- Velain, C. 1878. Étude microscopique des verres résultant de la fusion des cendres de graminées. *Bull. Soc. Mineral. Fr.*, 1: 113-124.
- Verdin, P.; Lopez-Saez, J.A. & J.F. Berger. 1998. Contribution of phytoliths analysis to the understanding of historical agrosystems in the Rhone Mid-Valley (Southern France). 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 51.
- Verma, S.D. & R.H. Rust. 1969. Observation on opal phytoliths in a soil biosequence in southeastern Minnesota. *Amer. Soc. Soil Sci., Proc.*, 33 (5) : 749-751.
- Verrecchia, E.P.; Dumont, J. & K.E. Verrecchia. 1993. Role of calcium oxalate biomineralization by fungi in the formation of calcretes: a case study from Nazareth, Israel. *Jour. Sedimentary Petrology*, 63 (5) : 1000-1006.
- Verrecchia, E.P.; Dumont, J. & K.E. Verrecchia. 1995. Role of calcium oxalate biomineralization by fungi in the formation of calcretes: a case study from Nazareth, Israel. *Jour. Sedimentary Petrology*, 65 : 1060-1066.
- Viehoever, A. & S. Prousky. 1938. Biochemistry of silica. *Amer. Jour. Pharm.*, 110 : 99-120.
- Vignal, C. 1963. Etude épidermique des quelques chloridoidées. *Des Fac. Sc. Marseille*, : 10-104, 45 pl.
- Vignal, C. 1964. Etude épidermique de *Tragus racemosus* (Hall.). *Bull. Soc. Bot. Fr.*, 3 (1-2) : 1-16.
- Vignal, C. 1965. Etude de l'épiderme de *Perotis rara* (R.Br.). *Bull. Soc. Bot. Fr.*, 112 (7-8) : 389-398.
- Vignal, C. 1969. Contribution à l'étude épidermique de quelques Cypéracées: *Carex*, *Cyperus*, *Scirpus* et *Kobresia*. *Annales de la Faculté des Sciences de Marseilles*, 42 : 313-321.
- Volk, R.J.; Rahn, R.P. & R.L. Weintraub. 1968. Silicon content of the rice plant as a factor influencing its resistance to infection by the blast fungus *Piricularia oryzae*. *Phytopathology*, 48 : 179-184.
- Volkova, E.V. & M.S. Blinnikov. 1996. Phytolith assemblages and dynamics of the highmountain communities in the north-western Caucasus, Russia. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 68.
- Von Aderkas, P.; Rogerson, A. & A.S.W. De Freitas. 1986. Silicon accumulation in fronds of the ostrich fern, *Matteuccia struthiopteris*. *Can. J. Bot.*, 64 : 696-699.
- Von Mohl, H. 1861. Über das Kieselskelett lebender Pflanzenzellen. *Botanische Zeitung*, 19 : 209-215.
- Voronkov, M.G. & E. Lukevitz. 1969. Biologically active compounds of silicon. *Russian Chemical Reviews*, 38 (12) : 975-986.
- Voronkov, M.G.; Zelchan, G.I. & E. Lukevitz. 1975. *Silizium und Leben*. Akademie-Verlag, Berlin.
- Vrydaghs, L.; Doutrelepon, H.; Beeckman H. & E. Haerincx. 1998. Identification of new *Phoenix dactylifera* L. phytoliths in archaeological context. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 62.
- Vrydaghs, L.; Verhoeven, K.; Doutrelepon, H.; Comet, C. & H. Gasche. 1996. The 95 Akhtamir (Armenia) excavation: Contribution of phytolith analysis to the description and interpretation of archaeological deposits. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 57.
- Vrydaghs, L.; Doutrelepon, H.; Runge, F.; Juan, J.; Comet, C. & J. Mercader. 1996. Phytolith from the Ituri rain forest, NE Zaire. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 58.
- Vrydaghs, L.; Cocquyt, Ch.; Dapper, M.; Deviergher, B.M.; Jaeger, C.; Degraeve, A.; Homes-Fredericq, D.; Frebutte, Gh. & J. Mertens. 1998. Phytolitharian taphonomy and landscape reconstruction al Lahun, Jordan. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 54.

W

- Wadham, M.D. & D.W. Parry. 1981. The silicon content of *Oryza sativa* L. and its effect on the grazing behaviour of *Agriolimax reticulatus* Muller. *Ann. Bot.*, 48 : 399-402.
- Walker, A.; Haeck, H. & L. Perez. 1978. Microwear of mammalian teeth as an indicator of diet. *Science*, 201 : 908-910.
- Walter, K.S. 1975. A preliminary study of the achene epidermis of certain *Carex* (Cyperaceae) using scanning electron microscopy. *Michigan Botanist*, 14 : 67-72.
- Wang, Y. & H. Lyu. 1993. *The study of phytolith and its applications*. China University Press.
- Wardrop, A. 1962. Cell wall organization in higher plants. *Bot. Rev.*, 28 : 241-285.
- Watanabe, N. 1955. Ash in archeological sites. *Proc. Joint. Meeting Anthropol. Soc. Nippon and Japan Soc. Ethnol.*, 9 : 169-171.
- Watanabe, N. 1968. Spodographic evidence of rice from prehistoric Japanese. *Journal of the Faculty of Science*, 3 (3) : 217-235.
- Watanabe, N. 1970. A spodographic analysis of millet from prehistoric Japanese. *Journal of the Faculty of Science*, 3 (5) : 357-384.
- Waterkeyn, L. & A. Bienfait. 1967. Les émergences callosiques et silicifiées des feuilles de Sélaginelles. *C.R. Hebdomadaires Acad. Sci. Paris, ser.D, Sci. Nat.*, 264 : 1608-1611.
- Waterkeyn, L.; Bienfait, A. & A. Peeters. 1982. Callose et silice épidermiques. Rapports avec la transpiration cuticulaire. *La Cellule*, 73 (3) : 267-287.
- Waterkeyn, L. & C. Dupont. 1982. L'observation des dépôts pariétaux de silice au microscope électronique à balayage. *Bulletin Societe Royale de Botanique de Belgique*, 115 (2) : 156-160.
- Watteau, F.; Villemain, G.; Burtin, G.; Ghanbaja, J. & F. Toutain. 1998. Biogenic silica tracing from plant to soil in a forest ecosystem. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 79.
- Weaver, F.M. & S.W. Wise, Jr. 1974. Opaline sediments of the southeastern coastal plain and horizon A: Biogenic origin. *Science*, 184 : 899-901.

- Webb, E.A. & F.J. Longstaffe. 1996 a. Oxygen isotope geochemistry of silica phytoliths. 1° *Europ. Meet. on Phytolith Research (Abstracts)*, : 69.
- Webb, E.A. & F.J. Longstaffe. 1996 b. Climate information from oxygen-isotope compositions of silica phytoliths in native prairie grasses. *Geological Association of Canada, Program with abstracts*, 21: A100.
- Webb, E.A. & F.J. Longstaffe. 1997. Oxygen isotope geochemistry of silica phytoliths. *Centro de Ciencias Medioambientales, CSIC, Monografías*, 4 : 233- 244. Madrid.
- Webster, G.L. 1975. Conspectus of a new classification of the Euphorbiaceae. *Taxon*, 24 : 593-601.
- Weiss, A. & A. Harzog. 1978. Isolation and characterization of a silicon-organic complex from plants. En: Gendz, G. & L. Lindquist (eds.), "Biochemistry of silicon and related problems." : 109-127. Plenum Press, New York.
- Werner, J. 1965. Über das Vorkommen phytogener Opalkörper im Boden und ihre bodengeologische Bedeutung. *Zeitschrift der deutschen geologischen Gesellschaft*, 115 : 123-130.
- Werner, J. & R. Roth. 1983. Silica metabolism. En: Läuchli, A. & R.L. Bielski (eds.), "Encyclopedia of Plant Physiology." 15 b: 683-694.
- Werner, O. 1928. Blatt-Aschenbilder heimischer Wiesengräser als Mittel ihrer Verwandtschafts- und Wertbestimmung. *Biologia Generalis*, 4 : 125-136.
- Wetzel, W. 1967. Die geologische Bedeutung der Phytolitharien, ein besonders Kapitel der Mikropalaeontologie. *N. Jb. Geol. Palaeont.*, : 731-735.
- Wiesner, J. 1867. *Einleitung in die technische Mikroskopie nebst mikroskopisch technischen Untersuchungen*. Wien.
- Wilding, L.P. 1967. Radiocarbon dating of biogenetic opal. *Science*, 156 (3771) : 66-67.
- Wilding, L.P. & L.R. Drees. 1968. Biogenic opal in soils as an index of vegetation history in the prairie peninsula. En: Bergstrom, R.E. (ed.), "The Quaternary of Illinois." Special Publication 14 : 96-103. College of Agriculture, University of Illinois, Urbana.
- Wilding, L.P. & L.R. Drees. 1971. Biogenic opal in Ohio soils. *Amer. Soc. Soil Sci., Proc.*, 35 (6) : 1004-1010.
- Wilding, L.P. & L.R. Drees. 1972 a. Biogenic opal in Ohio soils: Errata. *Amer. Soc. Soil Sci., Proc.*, 36 : 383-385.
- Wilding, L.P. & L.R. Drees. 1972 b. Contribution of biogenic opal to soil and subsequent transformation to crustaline components. 1972 *Clay Conference Abstracts, Madrid, Spain*. : 246-247.
- Wilding, L.P. & L.R. Drees. 1973. Scanning electron microscopy of opaque opaline forms isolated from forest soils in Ohio. *Amer. Soc. Soil Sci., Proc.*, 37 (4) : 647-650.
- Wilding, L.P. & L.R. Drees. 1974. Contributions of forest opal and associated crystalline phases to fine silt and clay fractions of soils. *Clays and Clay Minerals*, 22 (3) : 295-306.
- Wilding, L.P.; Brown, R.E. & N. Holowaychuk. 1967. Accessibility and properties of occluded carbon in biogenetic opal. *Soil Science*, 103 (1) : 56-61.
- Wilding, L.P.; Hallmark, C.T. & L.R. Drees. 1979. Dissolution and stability of biogenic opal. *Amer. Soc. Soil Sci., Jour.*, 43 : 800-802.
- Wilding, L.P.; Smeck, N.E. & L.R. Drees. 1977. Silica in soils: quartz, cristobalite, tridymite, and opal. En: Dixon, J.B. & S.B. Weed (eds.), "Minerals in Soil Environments." : 471-552. Soil Science Society of America, Madison, Wisconsin.
- Wilkins, V.E. 1928. Anatomical studies of certain Gramineae. *Ann. Bot.*, 42 : 305-316.
- Williams, D.E. & J. Vlamis. 1957. The effects of silicon on yield and manganese -54. Uptake and distribution in the leaves of barley plants grown in culture solution. *Plant Physiology*, 32 : 404-409.
- Williams, R.J.P. 1978. Summary: silica in biological systems. En: Gendz, G. & L. Lindquist (eds.), "Biochemistry of silicon and related problems." : 561-576. Plenum Press, New York.
- Williams, R.J.P. 1984. An introduction to biominerals and the role of organic molecules in their formation. En: Miller, A.; Phillips, D. & R.J.P. Williams (eds.), "Mineral phases in biology." *Philosophical Transactions of the Royal Society of London*, B304 : 411-424.
- Williams, R.J.P. 1986. Introduction to silicon chemistry and biochemistry. *Silicon Biochemistry. Ciba Foundation Symposium* 121 : 24-39, Wiley, Chichester, U.K.
- Wilson, S.M. 1985. Phytolith analysis at Kuk, an early agricultural site in Papua New Guinea. *Archaeology in Oceania*, 20 (3) : 90-96.
- Wittenbarber, R.T. 1945. Silicon absorption by rye and sunflower. *Amer. J. Bot.*, 32 : 539-549.
- Witty, J.E. & E.G. Knox. 1964. Grass opal in some chesnut and forestal soils in North Central Oregon. *Amer. Soc. Soil Sci., Proc.*, 28 (5) : 685-688.
- Wollast, R. & F.T. Mackenzie. 1983. The global cycle of silica. En: Aston, S.R. (ed.), "Silicon Geochemistry and Biogeochemistry." : 39-76. Academic Press, London, New York.
- Wu, N.; Lü, H.; Nie, G.; Wang, Y.; Yi, M. & G. Gu. 1992. The study of phytoliths in C₃ and C₄ grasses and its paleoecological significance. *Quaternary Sciences*, 8 (3) : 241-251.
- Wurschmidt, A. & A. Kostanje. 1998. Maize and kitchens. First evidence of phytoliths in archaeological sites on northwestern Argentina. 2° *Int. Meet. on Phytolith Research, (Abstracts)*, : 63.
- Wytenbach, A.; Tobler, L. & S. Bajo. 1991. Silicon concentration in spruce needles. *Zeitschrift für Pflanzenernährung und Bodenkunde*, 154 : 253-258.

X

- Xiong, G.Y.; Zhao, Q.G. & M.Z. Wang. 1979. Podzolic soils in the northern part of Da Zingaling. *Acta Pedologica Sinica*, 16 (2) : 110-123.

Y

- Yarilova, Y.A. 1952. Crystallization of phytoliths in soils. *Dokl. Akad. Nauk. USSR*, 83 (6) : 911-912.
- Yarilova, Y.A. 1956. Mineralogical investigation of a subalpine chernozem on andesite basalt. *Kora Vyvetraniya*, 2 : 45-60. Akad. Sci. USSR.

- Yarilova, Y.A. & E.J. Parfenova. 1956. Les transformations geoquimiques de certains elements de la nature. *C.R. VI Congres Int. Sci. Sol. Paris*, Vol. B : 567-578.
- Yeck, R.D. & F. Gray. 1969. Preliminary studies of opaline phytoliths from selected Oklahoma soils. *Oklahoma Academy Science, Proc.*, 48 : 112-116.
- Yeck, R.D. & F. Gray. 1972. Phytolith size characteristics between udols and ustols. *Amer. Soc. Soil Sci., Proc.*, 36 (4): 639-641.
- Yedokimoya, T.I. & L.A. Rudina. 1958. The role of grass vegetation in soil formation on the Moscow River floodplain. *Pochvovedenie*, 9 : 1013-1018.
- Yoshida, S. 1965. Chemical aspects of the role of silicon in physiology of the rice plant. *National Institute of Agriculture Science, Bull., series B*, 15 : 1-58.
- Yoshida, S.; Navasero, S.A. & E.A. Ramirez. 1969. Effects of silica and nitrogen supply on some leaf characters of the rice plant. *Plant and Soil*, 31 : 48-56.
- Yoshida, S.; Ohnishi, Y. & K. Kitagishi. 1959 a. The chemical nature of silicon in rice plant. *Soil and Plant Food*, 5 (1) : 23-27.
- Yoshida, S.; Ohnishi, Y. & K. Kitagishi. 1959 b. Role of silicon in rice nutrition. *Soil and Plant Food*, 5 (3) : 127-133.
- Yoshida, S.; Ohnishi, Y. & K. Kitagishi. 1962 a. Histochemistry of silica in rice plant. I. A new method for determining the localization of silicon within plant tissues. *Soil Science and Plant Nutrition*, 8 (1) : 30-35.
- Yoshida, S.; Ohnishi, Y. & K. Kitagishi. 1962 b. Histochemistry of silica in rice plant. II. Localization of silicon within the rice tissues. *Soil Science and Plant Nutrition* 8 (1) : 36-41.
- Yoshida, S.; Ohnishi, Y. & K. Kitagishi. 1962 c. Histochemistry of silica in rice plant III. The presence of cuticle-silica double layer in the epidermal tissue. *Soil Science and Plant Nutrition* 8 (2) : 1-5.
- Yoshida, S.; Ohnishi, Y. & K. Kitagishi. 1962 d. Chemical forms, mobility and deposition of silicon in rice plant. *Soil Science and Plant Nutrition* 8 (3) : 15-21.
- Yoshida, S.; Sogawa, K.; Pathak, M.D.; Juliland, B.O. & S. Sakamure. 1979. Soluble silicic acid as a sucking inhibitor substance in rice against the brown plant hopper. *Entomologia Experimentalis et Applicanta of Academia Sinica*, 26 (3) : 314-322.
- Yurtsever, Y. 1975. *Worldwide survey of stable isotopes in precipitation*. Rep. Sect. Isotope Hydrol., International Atomic Energy Agency, Wien.

Z

- Zebrowski, C. 1975. Etude d'une climatoséquence dans l'île de la Réunion. *Cah. ORSTOM, sér. Pédologique*, 13 (3/4) : 255-278.
- Zeidler, J.A. & D.M. Pearsall. (eds.). 1994. *Regional Environment and Cultural Chronology in Northern Manabi, Ecuador*. University of Pittsburgh, Latin American Archaeology Monograph Series, Volume 1.
- Zeitchek, D.V. 1959. Remains of cultivated plants from Horvat Beter (Beersheva). Preliminary notes. *Atiqot*, 2 : 48-52.
- Zhao, Z. & D.M. Pearsall. 1994. Using multivariate analysis techniques to search for diagnostic phytoliths. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 8 (2) : 4.
- Zhao, Z.; Pearsall, D.M. & R.S. Macneish. 1995. Phytolith evidence for early rice in Southern China. *Phytolith Research Symposium, 1995 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 9 (1) : 7.
- Ziegler, H.; Osmond, C.B.; Stichler, W. & P. Trimbom. 1976. Hydrogen isotope discrimination in higher plants: correlation with photosynthetic pathways and environment. *Planta*, 128 : 85-92.
- Zucol, A.F. 1992. Microfitolitos: I. Antecedentes y terminología. *Ameghiniana*, 29 (4) : 353-362.
- Zucol, A.F. 1995. Microfitolitos: II. Análisis de las clasificaciones. *Ameghiniana*, 32 (3) : 243-248.
- Zucol, A.F. 1996. Microfitolitos de las Poaceae argentinas: I. Microfitolitos foliares de algunas especies del género *Stipa* (Stipeae: Arundinoideae) de la provincia de Entre Ríos. *Darwiniana*, 34 (1-4) : 151-172.
- Zucol, A.F. 1998. Microfitolitos de las Poaceae argentinas: II. Microfitolitos foliares de algunas especies del género *Panicum* (Poaceae: Paniceae) de la provincia de Entre Ríos. *Darwiniana*, 36 (1-4) : 29-50.
- Zurita Noguera, J. 1993. Phytoliths in Mexican flora. *58th Annual Meeting of the Soc. Amer. Archaeology, Abstracts, The Phytolithien Newsletter*, 7 (3) : 6.
- Zurita Noguera, J. & A. Cyphers. 1996. El análisis de fitolitos en la arqueología olmeca: el caso de San Lorenzo. *1^o Europ. Meet. on Phytolith Research (Abstracts)*, : 59.
- Zurita Noguera, J. & E. McClung de Tapia. 1994. Identification of carbonized and mineralized Agave fiber remains from Terremote-Tlaltenco, Teotihuacan and Tlaltelolco. *Phytolith Research Symposium, 1994 Annual Meet. Soc. Amer. Archeol., Abstracts. The Phytolithien Newsletter*, 8 (2) : 6.

TESIS Y MANUSCRITOS NO PRESENTADOS EN PUBLICACIONES PERIÓDICAS.

- Andrejko, M.J. & D.A. Cohen. 1983. Differentiation of sedge phytoliths through use of Electron Microscopy. *Presentado en el 48th Annual Meeting of the Soc. Amer. Archaeol., Pittsburgh*.
- Andrejko, M.J. 1983. Classification of grass phytoliths through use of Fourier Grain Shape analysis. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.
- Ball, T.B. 1992 a. *Phytolith morphometrics: The use of image analysis for morphologic and systematic study of various grass phytoliths (Bouteloua, Panicum, Zea and Triticum)*. PhD dissertation, Brigham Young University, Utah.
- Bartoli, F. 1981. Le cycle biogéochimique du silicium sur roche acide. Application à deux systèmes forestiers tempérés (Vosges). Thèse de doctorat, Université de Nancy-I. 187 p.
- Bennett, D.M. 1980. *The occurrence and accumulation of silicon in temperate cereals*. PhD dissertation, University College of North Wales. 74 p.
- Bertoldi de Pomar, H.L. & E. Passeggi. Manuscrito no publicado. Silicofitolitos: Recopilación bibliográfica. 19 p.

- Bodner, C.C. 1986. *Prehistoric agricultural intensification in central Bontoc, Mountain Province Philippines*. PhD dissertation, Department of Anthropology, University of Missouri-Columbia.
- Bombin, M. 1984. *On phytoliths, late Quaternary ecology of Beringia, and information evolutionary theory*. B.A. Thesis, Australian National University, Canberra. 163 p.
- Bowdery, D. 1984. *Phytoliths: A multitude of shapes*. BA essay, Australian National University. 102 p.
- Bowdery, D. 1996. *Phytolith analysis applied to archaeological sites in the Australian arid zone*. Ph.D. Thesis, Australian National University, Canberra.
- Bozarth, S.R. 1985. *An analysis of opal phytoliths from rinds of selected Cucurbitaceae species*. MA thesis, University of Kansas. 59 p.
- Brizuela, M.A. 1985. *Silicon concentration of grasses from sites with differing prairie dog and bison grazing histories*. Ms Thesis. Colorado State University. Fort Collins.
- Brown, D. 1983. Prospects and limits of a phytolith key of grasses in the Central United States. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.
- Carbone, V.A. 1977. *Environment and prehistory in the Shenandoah Valley*. PhD. dissertation, The Catholic University of America. 277p.
- Chatters, R.M. 1941. *A study of the ash of some American commercial woods with special reference to the existence of siliceous skeletons in the residues of cell walls*. PhD dissertation, University of Michigan, Ann Arbor. 72 p.
- Chiswell, C. 1984. *A study of prehistoric andean storage by means of phytolith analysis*. MA Thesis, Trent University.
- Cid, M.S. 1985. *Effects of grazing exposure history and defoliation on silicon concentration of *Agropyron smithii**. Ms Thesis Colorado State University. Fort Collins.
- Collins, S.M. 1979. *Phytoliths as indicators of plant use at ancient Troy*. MS thesis, University of Minnesota. 181 p.
- Conner, D. 1983. Phytolith analysis in East Central Texas prehistory. *Presentado en el 48th Annual Meeting of the Soc. Amer. Archaeol., Pittsburgh*.
- Coughlin, E. & C. Classen. 1982. Siliceous and microfossil residues on stone tools: A new methodology for identification and analysis. *Presentado en el Annual Meeting of the Society for American Archaeology, Minneapolis*.
- Crowe, W.T. 1981. *Plant opal as evidence of the impact of lowland Maya settlement on vegetation*. MA Department of Anthropology, University of Chicago.
- Cummings, L.S. 1989. *Coprolites from medieval Christian Nubia: An interpretation of diet and nutritional stress*. PhD dissertation, University of Colorado. 204 p.
- Dayanandan, P. 1983. Histochemical staining reactions for biogenic silica. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.
- Franklin, C.I.; Dayanandan, P. & P.B. Kaufman. 1983. Structure and function of silica bodies in the epidermal systems of C₃ and C₄ pathway grasses. *Presentado en el American Society of Plant Physiology, Annual Meeting, Ft. Collins*.
- Fujiwara, H. 1987. Application of plant opal analysis to archeological surveys of agricultural sites. *The International Congress: Development and Isolation in the Pacific*. Osaka- Tokyo.
- Garber, L.W. 1966. *Influence of volcanic ash on the genesis and classification of two spodosols in Idaho*. MS thesis, University of Idaho. 155 p.
- Geis, J.W. 1972. *Biogenic silica in selected plant materials*. PhD dissertation, State University of New York, Syracuse University. 102 p.
- Geis, J. 1983. Classification of phytolith from angiosperm and coniferous trees. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.
- Geis, J. & R.L. Jones. 1973. Ecological significance of biogenic opaline silica. *Proc. of the 1st Soil Microcommunities Conference, Conf.711076-USAEC Soil Microcommunities. Ed. I.D.L. Diwcal*.
- Gross, E.R. 1973. *Buried soils of the drainageways in the driftless area of the upper Mississippi Valley*. PhD dissertation, Univ. of Minnesota. 195 p.
- Handreck, K.A. 1968. *Silica in the soil plant system*. MA University of Melbourne.
- Hart, D.M. 1992. *A field appraisal of the role of plant opal in the Australian environment*. Ph. D. Thesis, Macquarie University, Sydney. NSW Australia.
- Hurst, M.V. 1984. *Phytoliths as a source of silica in coals*. MS Theses. University of Georgia, Athens.
- Johnson, W.C.; Fredlund, G.G. & W. Dort. Jr. 1984. A 620,000 years phytolith record from the Central Nebraska loess. *Abstracts 8th Biennial Meet. of the Amer. Quaternary Association, Boulder*.
- Jones, R.L. 1962. *Biogenic opal in Illinois soils*. Ph D. Thesis. Univ. Illinois (Libr. Congr. Card. Mic. N° 62-6169), 87 p. Univ. microfilms Ann Arbor (Diss. Abstr., 23: 2640).
- Kamanina, I.Z. 1992. *Siliceous phytoliths in the soils of some natural zones*. Cand. Sc. (Biol.) dissertation (author abstract). Moscow State University, 17 p.
- Kaplan, L. & M.B. Smith. 1980. *Procedures for phytolith reference materials*. Manuscrito distribuido en el 45th Annual Meet. of the Soc. for Amer. Archaeology, Filadelfia.
- Kaufman, P.B. 1983. Silica bodies in silica and bulliform cells in C₃ and C₄ grasses. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.
- Kelly, E.F. 1990. Methods for extracting opal phytoliths from soil and plant material. *Internal Report, Department of Agronomy, Colorado State University, Fort Collins, USA*. 10 p.
- Krauss, R.K. 1967. The influence of atmospheric dust upon the Florence soils of eastern Kansas. D Theses Kansas State Univ., Manhattan.
- Kurmann, M.H. 1981. *An opal phytolith and palynomorph study of extant and fossil soils in Kansas*. MS Thesis, Kansas State University. 79 p.
- Lanning, F.C. 1983. *Silica and ash in Coastal Plants*. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.
- Lewis, R.O. 1979. *Use of opal phytolith in paleo-environmental reconstruction*. MA University of Wyoming, Laramie.

- Mac Donald, L.L. 1974. *Opal phytoliths as indicators of plant susseccion in northcentral Wyoming*. MA, University of Wyoming, Laramie. 71 p.
- Martínez, G. & M. Osterrieth. 1994. Interacción entre componentes minerales y biota en suelos de médanos costeros de Mar Chiquita, Buenos Aires. *IV Encuentro de Comunicaciones científicas, Centro de Graduados, FCEN-UNMDP*, Res. 29.
- McLean, B.L. 1995. Phytolith analysis of the Pretoria Saltpan: An attempt to determine palaeoenvironmental fluctuations within a 200,000 year lacustrine sequence. Unpublished Manuscript, University of the Witwatersrand, Johannesburg.
- Miksicek, C.D. & D.G. Stone. 1981. A comparison of maize and teosinte phytolith. 46th Meet. Annual of the Soc. Amer. of Archeology, San Diego.
- Miles, S.R. 1973. *Vegetative history and boundary stability of park areas in the Medicine Bow National Forest*. MS thesis, University of Wyoming. 69 p.
- Miller, A. 1980. Phytoliths as indicators of farming techniques. *Paper presented at the 45th Annual Meeting of the Soc. Amer. Archaeol., Philadelphia*.
- Miller, A. 1983. Phytoliths and marginal agriculture in the chalcolithic of Southern Israel. *Presentado en el 48th Annual Meeting of the Soc. Amer. Archaeol., Pittsburgh*.
- Moody, U.L. 1972. *Phytoliths as an interpretive device of paleoenvironments in archaeological sites*. MA thesis, University of Montana. 67 p.
- Mulholland, S.C. 1987. *Phytolith studies at Big Hidatsa, North Carolina*. Ph.D. Thesis, University of Minnesota.
- Mulholland, S.C. 1988. Similarities and differences in phytolith assemblages between wild-rice and *Leersia oryzoides*. 3rd *Phytolith Workshop, Columbia Missouri*.
- Norgren, J.A. 1973. *Distribution, from and significance of plant opal in Oregon soils*. PhD dissertation, Oregon State University. 165 p.
- Ollendorf, A.L. 1986. *A study of phytoliths from Philistine levels at Tel Migne (Ekron), Israel*. MS thesis, University of Minnesota. 180 p.
- Osterrieth, M.; Martínez, P.; Gonzales, G.; Menone, M.; Bernava, V.; Holz, S. & F. Oyarbide. 1994. *Seminarios sobre mineralogía de suelos: Ecología y mineralogía de suelos de dunas costeras de Mar Chiquita*. Fac. Cs. Exactas y Naturales, UNMDP - CECEN. 25 p.
- Osterrieth, M.; Tomas, M.; Bernava, V.; Oyarbide, F.; Borrelli, N.; Dal Bo, M.; Goncalvez, A.; Rossi, V.; Villamil, M. & R. Mondini. 1997. *Biominales en suelos y sedimentos de Mar del Plata y zona*. *Seminarios sobre mineralogía de suelos*. Fac. Cs. Exactas y Naturales, UNMDP-CECEN. 35 p.
- Osterrieth, M.; Tomas, M.; Bernava, V.; Oyarbide, F.; Herrera, L.; Mascioli, S. & P. Sierra. 1998. *Hongos formadores de biominales en horizontes orgánicos de Mar del Plata y Mar Chiquita*. *Seminarios sobre mineralogía de suelos*. Fac. Cs. Exactas y Naturales, UNMDP-CECEN. 28 p.
- Oyarbide, R.F. 1998. *Biominales fúngica de cristales de oxalato de calcio en horizontes orgánicos de argiudoles típicos de Laguna de los Padres, Partido de Gral. Pueyrredón, Prov. de Bs. As., Argentina*. Tesis de Grado FCEyN, UNMDP. 55 p.
- Padmore, J. 1987. *Analysis of the phytolith abundance of coastal sand dune systems in the Outer Hebrides*. Research Report N° 219/87. Dep. of Probability and Statistics, Univ. of Sheffield, UK.
- Pearsall, D.M. 1979. *The application of ethnobotanical techniques to the problem of subsistence in the Ecuadorian formative*. PhD dissertation, University of Illinois, Urbana. 270 p.
- Pearsall, D.M. 1980. Phytolith evidence of *Achira* and maize cultivation in formative Ecuador. *Presentado en el 45th Annual Meeting of the American Society of Archaeology, Philadelphia*.
- Pearsall, D.M. 1981 a. The role of phytolith analysis in paleoethnobotany: examples from South America research. 30th *Int. Bot. Congress, Sydney*.
- Pearsall, D.M. 1981 b. Phytolith analysis at nature trap Cave. *MS on file, American Archeological Division, University of Missouri, Columbia*.
- Pearsall, D.M. 1983 a. The Penon del Rio Project: Application of phytolith analysis to the study of raised field agriculture in the Guayas Basin, Ecuador. *Presentado en el 48th Annual Meeting of the American Society of Archaeology, Pittsburgh*.
- Pearsall, D.M. 1983 b. Identifying past agricultural activity through soil phytolith analysis: methodology and application to prehistoric tropical agriculture. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.
- Pearsall, D.M. & D.R. Piperno. 1986. Antiquity of maize cultivation in Ecuador: Summary and reevaluation of the evidence. *Presentado en el 51st Annual Meeting of the Society for American Archaeology, Nueva Orleans*.
- Pease, D.S. 1967. *Opal phytoliths as indicators of paleosols*. MS thesis, New Mexico State University. 81 p.
- Perry, C.C. 1985. *Silicification in biological systems*. PhD Thesis, Oxford University.
- Piperno, D.R. 1979. *Phytolith analysis of archaeological soils from central Panama*. MA thesis, Temple University. 99 p.
- Piperno, D.R. 1983 a. *The application of phytolith analysis to the reconstruction of plant subsistence and environments in prehistoric Panama*. PhD dissertation, Temple University. 459 p.
- Piperno, D.R. 1983 b. The application of phytolith analysis to the reconstruction of plant subsistence and environments in prehistoric Panama. (microfilm) Ann Arbor, University of Michigan.
- Piperno, D.R. 1983 c. A comparison and differentiation of maize and wild grass phytoliths: use of morphological criteria. *Presentado en el 48th Annual Meeting of the Soc. Amer. Archaeol., Pittsburgh*.
- Piperno, D.R. 1983 d. Phytolith taxonomy of Tropical cultigens and wild plants: Implications for archaeological research. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.
- Piperno, D.R. & D.M. Pearsall. 1990. Phytolith morphology in tropical Bambusoideae and Arundinoideae: Taxonomy, new forms and implications for archaeological maize identification. Ms. on file, MASCA, University Museum, University of Pennsylvania, Philadelphia.
- Prat, H. 1931. *L'épiderme des Graminées: étude anatomique et systématique*. PhD Faculte des Sciences de Paris, ser. A.
- Robinson, R. 1983 a. Biosilica analysis of 40 New World archaeological sites: A summary. *Presentado en el 48th Annual Meeting of the American Society of Archaeology, Pittsburgh*.
- Robinson, R. 1983 b. The Quaternary of Texas: Biosilica evidence. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan*.

- Rosen, A.M. 1980. Phytoliths as potential indicators of farming techniques. *Presentado en el 45th Annual Meeting of the Society for American Archaeology, Philadelphia, Pennsylvania.*
- Rosen, A.M. 1983. Phytoliths of cereals from two Negev Chalcolithic sites: identification and edaphic implications. *Presentado en el 48th Annual Meeting of the American Society of Archaeology, Pittsburgh.*
- Rovner, I. 1980a. The history and development of plant opal phytolith analysis. *Presentado en el 45th Annual Meeting of the American Society of Archaeology, Philadelphia.*
- Rovner, I. 1980b. Fitolítica. *Presentado en el Simposio Perspectiva en el estudio de la Lítica, Inst. de Invest. Antropológicas, UNAM, México D.F.*
- Rovner, I. 1981. Recent contribution of opal phytolith analysis to the study of agricultural origins in America. *30th Int. Bot. Congress, Sydney.*
- Rovner, I. 1983 a. Multi-disciplinary sense and nonsense: is a science of phytoliths really necessary? *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan.*
- Rovner, I. 1983 b. Phytolith strategies in cultural resource management, site survey, testing and determination of significance. *Presentado en el 48th Annual Meeting of the Soc. Amer. Archaeol., Pittsburgh.*
- Sangster, A.G. 1967. *Some environmental factors affecting silica deposition in higher plants with special reference to the Gramineae.* PhD dissertation, University College of North Wales, Bangor. 181 p.
- Sangster, A.G. 1983. Processes of phytolith production in plants. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan.*
- Smith, M.B. 1982. *Phytolith development and morphology in Zea mays L. and Zea mexicana (Schrader) Kuntze.* MS thesis, University of Massachusetts. 199 p.
- Sowers, A.E. 1977. *Effects of silicic acid analogs on silica body production and wall ultrastructure in stinging cells of Urtica pilulifera.* PhD Texas A&M University, College Station.
- Struve, G.A. 1835. *De silica in plantis nonnullis.* Phil. Diss., Berlin.
- Suess, E. 1966. *Opal phytoliths.* MS thesis, Kansas State University. 77 p.
- Tecchi, R.A. 1983. Microsilicofitolitos en suelos de la Región Pampeana. *XIX Congreso bras. Cienc. Sol., Resúmenes, Curitiba, Brasil.*
- Thomson, M.C. 1982. Phytolith studies: Techniques and their application to the examination of phytoliths from plants and sediments collected at Tel Michal, Israel. MS Plan B paper, University of Minnesota. 175 p.
- Twiss, P.G. 1983. Morphology of opal phytoliths in C₃ and C₄ grasses. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan.*
- Wilding, L.P. 1983. Factors affecting biogenic opal stability in soils and geologic environments. *Presentado en el 149th AAAS Annual Meeting, Detroit, Michigan.*
- William, A.S. 1983. Phytoliths, Archaeology and Caveats: A case study from New York State. *Presentado en el 48th Annual Meeting of the Soc. Amer. Archaeol., Pittsburgh.*
- Wilson, S.M. 1982. *Phytolith evidence from Kuk, an early agricultural site in Papua New Guinea Highlands.* MA Thesis, Canberra, Australian National University.
- Witty, J.E. 1962. *Grass opal in some chestnut and forested soils of Wasco County, Oregon.* MS thesis, Oregon State University. 47 p.
- Yeck, R.D. 1969. Selected characteristics of opaline phytoliths between some udolls and ustolls. PhD Thesis, Oklahoma State University, Stillwater.
- Zhao, Z. 1991. A methodological study of phytolith analysis and its applications to early agriculture in northwestern China. MS Thesis, Dep. Anthropology, University Missouri, Columbia.
- Zucol, A.F. 1996. Estudios morfológicos comparativos de especies de los géneros Stipa, Panicum y Paspalum (Poaceae), de la provincia de Entre Ríos. Doc. Thesis, Fac. Cs. Nat., Universidad Nacional de La Plata. 558 p.
- Zurita Noguera, J. 1987. Análisis de fitolitos de muestras de suelos del sitio arqueológico de Guachimontón, Teuchitlán, Jalisco. Tesis en Arqueología, Escuela Nacional de Antropología e Historia, México, D.F.