

THE PHYCOLOGICAL SOCIETY OF AMERICA

'Ipse super maria fundavit eum.' *Psalmi.*

Volume X

News Bulletin, June, 1957

Number 31

P. C. SILVA, Editor and Secretary

Phycological Literature for 1955

(concluded)

Compiled by P. C. SILVA

References marked with asterisks have been obtained from secondary sources and have not been verified.

LAWSON, G. W. Rocky shore zonation in the British Cameroons. *J. West Afr. Sc. Ass.* 1(2): 78-88. 1 Jl

LAZAROFF, N. (Abstr.) The demonstration of a development cycle in the growth of a blue-green alga. *Bact. Proc.* 1955: 59-60. (*Nostoc*)

LE GALLO, Père C. Bachelot de la Pylaie (1786-1856). Naturaliste, voyageur, artiste et archéologue. *Nat. Canad.* 82(10/11): 173-185. O/N

LESTER, J. John Ralfs. Microscope 10(6): 165-166, Mr Ap (biographical note)

LEVRING, T. Some remarks on the structure of the gametes and the reproduction of *Ulva lactuca*. *Bot. Not.* 108(1): 40-45. 20 Mr (incl. respiration)

—. Contributions to the marine algae of New Zealand. I. Rhodophyta: Goniotrichales, Bangiales, Nemalionales and Bonnemaisoniales. *Ark. Bot. n.s.* 3(5): 407-432. 16 D (*Pseudogloioiphloea*, gen. nov.; *Erythrotrichia*, *Acrochactium*, *Seinaia*, *Chaetangium*, *Ptilonia*, *Delisea*, sp. nov.)

LEWIN, J. C. Silicon metabolism in diatoms. II. Sources of silicon for growth of *Navicula pelliculosa*. *Pl. Physiol.* 30(2): 129-134. Mr

—. (Abstr.) Respiration and silicon uptake in *Navicula pelliculosa*. *Ibid.* 30(suppl.): xxxiii. Au

—. The capsule of the diatom *Navicula pelliculosa*. *J. Gen. Microbiol.* 13(1): 162-169. Au

—. Silicon metabolism in diatoms. III. Respiration and silicon uptake in *Navicula pelliculosa*. *J. Gen. Physiol.* 39(1): 1-10. 20 S

—. (Abstr.) Physiological races of the diatom, *Navicula pelliculosa*. *Biol. Bull.* 109(3): 343. D

LEWIN, R. A. Culture of *Prasiola stipitata* Suhr. *Can. J. Bot.* 33(1): 5-10. 19 Ja

—. (Abstr.) Paralysis in double mutants of *Chlamydomonas*. *Biol. Bull.* 109(3): 343. D

—. (Abstr.) Polysaccharides of marine algae. *Ibid.* 373.

LEWIN, R. A., AND R. H. MINTZ. Inhibitors of photosynthesis in *Chlamydomonas*. *Arch. Biochem. Biophys.* 54(1): 246-248. Ja

LEWIS, J. R. The mode of occurrence of the universal intertidal zones in Great Britain. With a comment by T. A. and Anne Stephenson. *J. Ecol.* 43(1): 270-290. Ja

LIHOTSKY, O. [The influence of some kinds of soft lignite on the cultures of algae.] *Universitas Carolina* 1(2): 155-213. (Czech with English summary)

LIHOTSKY, O., AND K. ROSA. [Verzeichnis der mährisch-schlesischen Hydrobiologische Ans

- Algen.] Verlag Tschechosl.-Akad. Wiss., Praha. 260 pp. (in Czech)
- LINDBERG, B. Low-molecular carbohydrates in algae. VIII. Investigation of two green algae. *Acta Chem. Scand.* 9(1): 169. (*Enteromorpha, Chlorella*). X. Investigation of *Furcellaria fastigiata*. *Ibid.* 9(7): 1093-1096. XI. Investigation of *Porphyra umbilicalis*. *Ibid.* 1097-1099.
- . Methylated taurines and choline sulphate in red algae. *Ibid.* 9(8): 1323-1326. (*Ptilota, Porphyra, Gelidium*)
- LINDBERG, B., AND J. MCPHERSON. Low-molecular carbohydrates in algae. VI. Laminitol, a new C-methyl inositol from *Laminaria cloustonii*. *Ibid.* 8(10): 1875-1876. 31 Ja
- LINSKENS, H. F. Physiologie der Fortpflanzung und Sexualität. *Fortschr. Bot.* 17: 791-818.
- . Was ist Agar? *Mikrokosmos* 44(4): 94-95. Ja
- . Beobachtungen an Chloroplasten. *Ibid.* 45(1): 1-4. O (incl. *Zygnum, Spirogyra*)
- LOPEZ, J. Variación alométrica en *Ceratium tripos*. *Invest. Pesq.* 2: 131-159. N
- LOUB, W. Algenbiozönosen des Neusiedler Sees. *Sitzungsber. Österr. Akad. Wiss. Math.-Natur. Kl. Abt. I*, 164(1/2): 81-107.
- LOVREKOVICH, L. [The algal flora of Zsóry spring at Mezőkövesd.] *Bot. Közl.* 46(3/4): 219-222. (in Hungarian)
- LOW, E. M. Studies on some chemical constituents of diatoms. *J. Mar. Res.* 14(2): 199-204. 31 O (amino acids, sterols)
- LUBET, P. E. Notes sur le phytoplankton du Bassin d'Arcachon. Vie et Milieu 6(1): 53-59. Au
- LUCAS, C. E. External metabolites in the sea. *Deep-sea Res.* 3 (suppl.): 139-148.
- LUCAS, G. Oolites marines actuelles et calcaires oolithiques récents sur le rivage africain de la Méditerranée orientale (Égypte et Sud Tunisien). *Bull Stat. Océanogr. Salammbo* 52: 19-38. S
- LÜDEMANN, D. Prof. Dr. Herbert Berger. *Arch. Hydrobiol.* 50(3/4): 619. Je
- LUND, J. W. G. The ecology of algae and waterworks practice. *Proc. Soc. Water Treatment Exam.* 4: 83-109.
- . Further observations on the seasonal cycle of *Melosira italica* (Ehr.) Kütz. subsp. *subarcatica* O. Müll. *J. Ecol.* 43(1): 90-102. Ja
- . Felix Eugen Fritsch (1879-1954). In memoriam. *Rev. Alg. n.s.* 1(3): 131-140. Ap (bibliography, portrait)
- . *Pseudochlorella* nov. nom. *Österr. Bot. Zeitschr.* 102(1): 104. 29 Ap
- . (Abstr.) The Freshwater Biological Association: general observations. *Phyc. Bull.* 3: 26-28. N
- . Contributions to our knowledge of British algae, XIV. Three new species from the English Lake District. *Hydrobiologia* 7(3): 219-229. 1 D (*Chlorochytrium, Pseudokephyrium, Oscillatoria*, sp. nov.)
- LUNDH-ALMESTRAND, A. The diatom flora of Scanian lakes. *Verh. Int. Ver. Limnol.* 12: 256-262.
- MACAN, T. T. Felix Eugen Fritsch. *Hydrobiologia* 7(1/2): 1-7. 1 Je (portrait)
- MACINTYRE, T. M. The digestibility of dried ground seaweed meal by the laying hen. *Can. J. Agr. Sc.* 35(2): 168-174. Mr/Ap (*Ascophyllum*)
- MAEDA, H. Studies on Yosa-Naikai. 4. Classification of phytoplankton communities and relation between communities and water masses. *J. Shimonoseki Coll. Fish.* 4(3): 301-310. Au
- MAGNE-SIMON, M. F. Une forme particulière de colonie observée chez une diatomée marine, *Navicula scutulorum* Bréb. *Rev. Alg. n.s.* 1(4): 191-195. S
- MALCHIOW-MØLLER, O., G. J. BONDE, AND E. FJERDINGSTAD. Treatment of domestic sewage in lagoons. Danish experience from a two-year period. *Schweiz. Zeitschr. Hydrol.* 17(1): 98-122. 15 Je
- MANTON, J. Plane of bilateral symmetry in plant cilia. *Nature* 176 (4472): 123-124. 16 J1 (*Fucus*)

- . Observations with the electron microscope on *Synura caroliniana* Whitford. Proc. Leeds Phil. Lit. Soc. (Se. Sect.) 6(5): 306-316. D
- MANTON, I., B. CLARKE, AND A. D. GREENWOOD. Observations with the electron microscope on biciliate and quadriciliolate zoospores in green algae. J. Exper. Bot. 6(16): 126-128. F (*Draparnaldia*, *Chactomorpha*)
- MARGALEF, R. Temperature and morphology in freshwater organisms. Verh. Int. Ver. Limnol. 12: 507-514. (incl. *Scenedesmus*)
- . Materiales para una flora de las algas del NE. de España VI, Desmidiales, Rhodophyceae. Coll. Bot. 4(3): 319-329.
- . Temperatura, dimensiones y evolución. Publ. Inst. Biol. Apl. 19: 13-94. Ap
- . Comunidades bióticas de las aguas dulces del noreste de España. *Ibid.* 21: 5-86. D
- MARGALEF, R., M. DURAN, AND F. SAIZ. El fitoplancton de la ría de Vigo de enero de 1953 a marzo de 1954. Invest. Pesq. 2: 85-129. N
- MARKALI, J., AND E. PAASCHE. On two species of *Umbelliosphaera*, a new marine coecolithophorid genus. Nytt Mag. Bot. 4: 95-100.
- MARTINSSON, A. *Monostroma Grevillei* (Thuret) Wittrock, a spring alga on the coast of Öland. Svensk Bot. Tidskr. 49(1/2): 252-258. 20 Ap
- MARUMO, R. Marine diatoms of the east coast of northern Japan in the winter from 1953 to 1954. Oceanogr. Mag. 6(4): 165-173. Ja
- . Analysis of water masses by distributions of the microplankton (1). Distributions of the microplankton and their relation to water masses in the North Pacific Ocean in the summer of 1954. J. Oceanogr. Soc. Japan 11(3): 133-137. O
- . Distribution of plankton diatoms in relation to hydrographic conditions in the sea area east of Honshu in the summer of 1954. Rec. Oceanogr. Works Japan n.s. 2(2): 115-119. O
- MASSON, C. R. The degradation of carrageenin. I. Kinetics in aqueous solution at pH 7. Can. J. Chem. 33(4): 597-603. Ap
- MASSON, C. R., AND D. A. I. GORING. Studies on carrageenin: the effect of shear rate on viscosity. *Ibid.* 33(5): 895-903. My
- MASSON, C. R., D. SANTRY, AND G. W. CAINES. The degradation of carrageenin. II. Influence of further variables. *Ibid.* 33(6): 1088-1096. Je
- MATSUI, T., AND T. YASUDA. On the shedding of the spores of *Gloio-peltis tenax* (Turn.) J. Ag. and *G. fureata* Post. et Rupr. J. Shimono-seki Coll. Fish. 4(2): 245-251. Mr
- MAYER, A. M., AND M. EVENARI. The nutritional value of oven-dried *Chlorella*. Bull. Res. Council Israel 4(4): 401-402. My
- McQUATE, A. G. Photosynthesis and respiration of the phytoplankton in Sandusky Bay. Diss. Abstr. 15(5): 681. My (Ohio State Univ.)
- MERAC, M. L. du. Sur la présence de fructosanes chez *Dasycladus vermicularis* (Scopoli) Krasser. C. R. Acad. Sc. 241(1): 88-90. 4 Jl
- MERAT, P. Les alginates et leurs emplois industriels. Rev. Franç. Corps Gras 2(2): 89-94. F
- MERCER, F. V., A. J. HODGE, A. B. HOPE, AND J. D. McLEAN. The structure and swelling properties of *Nitella* chloroplasts. Austral. J. Biol. Sc. 8(1): 1-18. F
- METZNER, I. Zur Chemie und zum submikroskopischen Aufbau der Zellwände, Schichten und Gallerten von Cyanophyceen. II. Zellmorphologische und zellphysiologische Studien an Cyanophyceen. Arch. Microbiol. 22(1): 45-77. 18 My
- MILNER, H. W. Some problems in large-scale culture of algae. Se. Monthly 80(1): 15-20. Ja
- *MILOVANOVA, I. V. Novae et curiosae Diatomae Peninsulae Tamanj actae neogeneae. Bot. Mater. Otd. Sporovych, Bot. Inst. Akad. Nauk SSSR 10: 69-72. 1 Ja
- MITCHELL, T. J., AND C. S. POTTS. Through-circulation drying of sea-

- weed. V. *Ascophyllum nodosum*; *Fucus serratus*; *Fucus vesiculosus*. J. Sc. Food Agr. 6(7): 402-412. Jl
- MIYACHI, S., T. HIROKAWA, AND I. TAMIYA. Effect of quinone on the light-induced capacity of carbon dioxide-fixation in green algae. J. Biochem. 42(6): 737-743. N (*Chlorella*)
- MIYACHI, S., S. IZAWA, AND H. TAMIYA. Effect of oxygen on the capacity of carbon dioxide-fixation by green algae. *Ibid.* 42(3): 221-244. My (*Chlorella*)
- MOEWUS, F. Biogenesis of the flavonoids. Ann. N. Y. Acad. Se. 61(3): 660-664. 8 Jl
- . (Abstr.) Interrelations between growth and sexuality in a homothallic strain of *Polytoma uvella*. J. Protozool. 2(suppl.): 7. Au
- MÖLDER, K. Die Diatomenflora des Moores Lähdesuo bei der Stadt Hamina in Südfinnland. Arch. Soc. Zool. Bot. Fenn. "Vanamo" 9 (suppl.): 202-207. Ap
- MOLINIER, René, AND Roger MOLINIER. Éléments de bionomie marine et de phytosociologie aux îles Sanguinaires (Corse). Rev. Gén. Bot. 62(741): 675-682. N
- MOLINIER, Roger. Deux nouvelles formations organogènes construites en Méditerranée occidentale. C. R. Aead. Se. 240(22): 2166-2168. 1 Je
- MONER, J. G. Cell wall structure in *Pediastrum* as revealed by electron microscopy. Am. J. Bot. 42(9): 802-806. 28 N
- MONTAGNIER, L., AND H. POUSSEL. Recherches sur la phototaxis du chromatophore de "Mougeotia." Actes 73^e Congr. A.F.A.S. (Poitiers 1954): 369-371.
- *MONTANARI, A. A. Una riqueza nacional: las algas. Chacra 25(297): 80. Au
- MONTFORT, C., A. RIED, AND I. RIED. Die Wirkung kurzfristiger wärmer Bäder auf Atmung und Photosynthese im Vergleich von eurythermen und kalt-stenothermen Meeresalgen. Beitr. Biol. Pflanzen 31(2/3): 349-375.
- MORI, M. [A new locality for two species of fresh-water Rhodophyceae.] Bull. Jap. Soc. Phyc. 3(2): 44-46. S (*Nemalionopsis tortuosa*, *Thorea okadai*)
- MORIMURA, Y., T. NIIEI, AND T. SASA. Outdoor bubbling culture of some unicellular algae. J. Gen. Appl. Microbiol. 1(3): 173-182. S (*Scenedesmus*, *Chlorella*)
- MORITA, M. [Study on the sapid components in Laminariae (brown seaweeds). III. Paper chromatographic investigation of nitrogenous sapid components in Laminariae.] J. Chem. Soc. Japan, Pure Chem. Sect. 76(6): 692-694. Je
- MORRIS, E. O. Seaweed as a source of yeast food. I. J. Sc. Food Agr. 6(10): 611-618. II. *Ibid.* 618-621. O
- MOSES, V. AND P. J. SYRETT. The endogenous respiration of micro-organisms. J. Baet. 70(2): 201-204. Au (incl. *Chlorella*)
- MOSHIKOVA, N. O. [Two interesting algae from the family Chaetophoraceae.] Bot. Zhurn. Akad. Nauk Ukrain. 12(2): 95-98. (*Draparnaldia platyzonata*, *Chaetophora attenuata*)
- MOTODA, S., AND Y. KAWARADA. Diatom communities in western Aleutian waters on the basis of net samples collected in May-June 1953. Bull. Fac. Fish. Hokkaido 6(3): 191-200. N
- MOYSE, A. Les cultures d'algues; la culture accélérée des Chlorelles. La Nature 3238: 41-47. F
- MÜLLER, J. Über die AlgenGattungen *Tribonema* und *Microspora*. Mikroskosmos 44(6): 130-134. Mr
- . Über Algen bewohnende Pilze. *Ibid.* 44(7): 153-158. Ap
- MUTHU, M. S. Unusual lowering of salinity in the Madras coastal area and its effect on the plankton. Current Se. 24(3): 87-89. Mr
- MYERS, J. (Abstr.) Simultaneous measurement of growth and photosynthesis of *Chlorella* in a steady-state. Pl. Physiol. 30(suppl.): viii. Au
- MYERS, J., AND W. A. KRATZ. Relations between pigment content and photosynthetic characteristics in a

- blue-green alga. J. Gen. Physiol. 39(1): 11-22. 20 S (*Anacystis*)
- NAIR, R. V., AND R. SUBRAHMANYAN. The diatom, *Fragilaria ocellata* Cleve, an indicator of abundance of the Indian oil sardine, *Sardinella longiceps* Cuv. and Val. Current Sc. 24(2): 41-42. F
- NAKAZAWA, S. Staining embryos of *Sargassum confusum* Ag., a brown alga. Bull. Mar. Biol. Stat. Asamushi 7(2/4): 147-151. Mr
- . Polarity determination in *Cocophora* eggs by means of differential compression. Bull. Jap. Soc. Phyc. 3(1): 11-16. My
- . Polar dissolving of the mucilaginous substance around the eggs of fucaceous algae. *Ibid.* 3(3): 67-70. D
- . Abnormal eggs from *Cocophora*, with special interests in the origin of half embryos. Bot. Mag. Tokyo 68(807): 232-234. S
- . Sensibilidad diferencial de los óvulos de *Cocophora langsdorffii*. An. Inst. Biol. Univ. México 26(1): 19-22. 26 S
- NASR, A. H. Ecological observations on the marine algae of Ghardaqa (Red Sea). Hydrobiologia 7(3): 245-255. 1 D
- NATHAN, M. A., AND J. COWPERTHWAITE. "Crithidia factor"—a new member of the folic acid group of vitamins. J. Protozool. 2(2): 37-42. My (synthesized by *Ochromonas*)
- NAUWERCK, A. *Dicras skujai*, eine neue *Dicras*-Art aus Lappland. Svensk Bot. Tidskr. 49(1/2): 352-353. 20 Ap
- NAYLOR, M. The life history of *Adenocystis utricularis* (Bory) H. et H. Trans. R. Soc. N. Z. 83(2): 295-301. S
- NELSON, P. R., AND W. T. EDMONDSON. Limnological effects of fertilizing Bare Lake, Alaska. U. S. Fish Wildlife Serv. Fish. Bull. 56(102): 415-436.
- NEWELL, N. D., AND J. IMBRIE. Biogeographical reconnaissance in the Bimini area, Great Bahama Bank. Trans. N. Y. Acad. Se. ser. 2, 18(1): 3-14. N (incl. corallines, blue-greens)
- NICOL, J. A. C. Physiological control of luminescence in animals. In Johnson, F. H. (ed.), The luminescence of biological systems, pp. 299-319. (brief reference to *Noctiluca*)
- NIELSEN, C. S. Florida Oscillatoriaceae III. Q. J. Fla. Acad. Se. 18 (2): 84-112. Je. *Ibid.* 18(3): 177-188. 30 N
- NIHEI, T. A phosphorylative process, accompanied by photochemical liberation of oxygen, occurring at the stage of nuclear division in *Chlorella* cells. I. J. Biochem. 42(3): 245-256. My
- NISHIZAKI, Y. Bioelectric phenomena accompanying osmosis in a single plant cell. Cytologia 20(1): 32-40. Mr (*Nitella*)
- NODA, K. [On seaweed in China.] Bull. Jap. Soc. Phyc. 3(1): 26-27. My
- NORRIS, L., R. E. NORRIS, AND M. CALVIN. A survey of the rates and products of short-term photosynthesis in plants of nine phyla. J. Exper. Bot. 6(16): 64-74. F
- NOVA SCOTIA RESEARCH FOUNDATION. Selected bibliography on algae. Number Three. Mimeographed. Ja (chemical composition, ecology, culturing, classification, morphology, utilization)
- NOZAWA, K., AND Y. NOZAWA. Studies on the protoplasm of algae. I. Bull. Jap. Soc. Se. Fish. 20(10): 878-880. (*Porphyra*; incl. permeability)
- NUNN, J. R., AND M. M. VON HOLDT. Galactosyl glycerol from *Gelidium pristoides* and *Gracilaria confervoides*. J. Am. Chem. Soc. 77(9): 2551-2552. 5 My
- NYGAARD, G. On the productivity of five Danish waters. Verh. Jnt. Ver. Limnol. 12: 123-133.
- ODUM, H. T., J. B. LACKEY, J. HYNEs, AND N. MARSHALL. Some Red Tide characteristics during 1952-1954. Bull. Mar. Se. Gulf Carib. 5(4): 247-258. D (*Gymnodinium*)
- ODUM, H. T., AND E. P. ODUM. Trophic structure and productivity of a windward coral reef community on Eniwetok Atoll. Ecol. Monogr. 25(3): 291-320. JI

- OGATA, E. Perforating growth of *Conchoecia* in calcareous matrices. Bot. Mag. Tokyo 68(810): 371-372. D
- OGATA, E., AND H. TAKADA. Elongation and shrinkage in thallus of *Porphyra tenera* and *Ulva pertusa* caused by osmotic changes. J. Inst. Polytech. Osaka City Univ. ser. D, 6: 29-41. O
- OGINO, C. Biochemical studies on the nitrogen compounds of algae. J. Tokyo Univ. Fish. 41(2): 107-152. Mr
- OHMI, H. Contributions to the knowledge of Gracilariaeae from Japan. I. Critical notes on the structure of *Gracilaria textorii* (Suringar) J. Ag. Bull. Fac. Fish. Hokkaido Univ. 5(4): 320-331. F
- . On the male reproductive organ of *Gracilaria textorii*. Bull. Jap. Soc. Phyc. 3(1): 16-19. My
- . English names and Hawaiian names of the marine algae. *Ibid.* 3(2): 42-44. S. *Ibid.* 3(3): 71-74. D.
- OHMI, H., AND K. KURODA. On the chemical component of gracilaricaceous plants from various localities. *Ibid.* 3(1): 19-22. My
- OKADA, Y., T. ITO, S. KUBOTA, H. YAMAZAKI, AND S. KUSANO. Limnological studies of Miyagawa reservoir, Mie Prefecture, before water preservation. J. Fac. Fish. Pref. Univ. Mie 2(1): 1-41. 1 Je (brief reference to algae)
- OKUNO, H. Electron-microscopical study on fine structures of diatom frustules. XIII. Bot. Mag. Tokyo 68(802): 125-128. Ap
- OLIVE, J. R. Some aspects of plankton associations in the high mountain lakes of Colorado (USA). Verh. Int. Ver. Limnol. 12: 425-435.
- OLIVEIRA, L. P. H. de, R. NASCIMENTO, L. KRAU, AND A. MIRANDA. Observações biogeográficas e hidrobiológicas sobre a lagôa de Maricá. Mem. Inst. Oswaldo Cruz 53(2/4): 171-227.
- . Biogeographic and hydrobiologic observations on the Lake of Maricá. *Ibid.* 228-262.
- OLIVER, G. C. S. Biology of the Eye Brook Reservoir—II: The second seven years. J. Inst. Water Engrs. 9(6): 511-519. O
- OLIVIER, S. R. Contribution to the limnological knowledge of the Salada Grande Lagoon. 2. Plankton seasonal variations and some correlations with physical-chemical factors. Verh. Int. Ver. Limnol. 12: 302-308.
- OLSEN, A. Freezing fish in alginate jelly. Food Mfr. 30: 267-270. 1 Jl
- OLSEN, S. Lake Lyngby Sø. Limnological studies on a culturally influenced lake. Folia Limnol. Scand. no. 7. 152 pp.
- O'NEILL, A. N. Sulphated derivatives of laminarin. Can. J. Chem. 33(6): 1097-1101. Je (from *Laminaria digitata*)
- . 3,6-anhydro-D-galactose as a constituent of κ -carrageenin. J. Am. Chem. Soc. 77(10): 2837-2839. 20 My
- . Derivatives of 4- α -D-galactopyranosyl 3,6-anhydro-D-galactose from κ -carrageenin. *Ibid.* 77(23): 6324-6326. 5 D
- ØSTERGAARD KRISTENSEN, H. P. Investigations into the *Euglena gracilis* method for quantitative assay of vitamin B₁₂. Acta Physiol. Scand. 33(2/3): 232-237. 6 Je
- OSTERHOUT, W. J. V. (Abstr.) Reversible shrinkage in *Chaetomorpha*. Biol. Bull. 109(3): 366. D
- OSWALD, W. J., AND H. B. GOTAAAS. Photosynthesis in sewage treatment. Proc. Am. Soc. Civil Engrs. 81(686). 27 pp. My
- PAECH, K., AND M. V. TRACEY (ed.) Modern methods of plant analysis. Vols. 2, 3, 4. Springer-Verlag, Berlin.
- PALIK, P. Studies on *Eudorina illinoiensis* (Kofoid) Pascher. Rev. Alg. n.s. 1(3): 146-151. Ap
- . [Recent data on the development of *Eudorina illinoiensis* (Kofoid) Pascher.] Bot. Közl. 46(1/2): 69-81.
- PALMER, C. M., AND W. M. INGRAM. Suggested classification of algae and protozoa in sanitary science. Sewage Ind. Wastes 27(10): 1183-1188. O

- PALMER, C. M., AND T. E. MALONEY. Preliminary screening for potential algicides. *Ohio J. Sc.* 55(1): 1-8. Ja
- PALMER, C. M., AND C. M. TARZWELL. Algae of importance in water supplies. *Public Works Mag.* 86(6): 107-120. Je
- PAPENFUSS, G. F. Classification of the algae. In *California Academy of Sciences, A century of progress in the natural sciences, 1853-1953*, pp. 115-224. 20 O
- PARKE, M., I. MANTON, AND B. CLARKE. Studies on marine flagellates. II. Three new species of *Chrysocromulina*. *J. Mar. Biol. Ass. U.K.* 34(3): 579-609. O
- PAVILLARD, J. L'oeuvre algologique de Ch. Flahault. *Bull. Soc. Bot. France* 102(5/6): 240-241. My/Ju
- PEAT, S., W. J. WHELAN, AND H. G. LAWLEY. Isolation of mannitol from laminarin. *Chem. & Ind.* 1955 (2): 35-36. 8 Ja
- PEKKARI, S. Om *Batrachospermum moniliforme* och *Sirodotia succica* längst upp i Bottniska viken. (On *Batrachospermum moniliforme* and *Sirodotia succica* in the innermost part of the Bothnian Bay.) *Svensk Bot. Tidskr.* 49(1/2): 349-351. 20 Ap
- PENNNAK, R. W. Comparative limnology of eight Colorado mountain lakes. *Univ. Colo. Stud. Biol. Ser. no. 2.* 75 pp. Jl
- PERES, J. M., AND J. PICARD. Biotopes et biocoenoses de la Méditerranée occidentale comparés à ceux de la Manche et de l'Atlantique nord-oriental. *Arch. Zool. Expér. Gén.* 92 (1): 1-71. 10 F
- PERLMAN, D. (convenor) Symposium on the maintenance of cultures of microorganisms. *Bact. Rev.* 19(4): 280-283. D
- PERMAN, J., AND A. VINNIKOVA. [Three chrysomonads of winter plankton.] *Preslia* 27(3): 272-279. (*Catenochrysis*, nom. nov.)
- PFIRSCH, R. Observation microscopique des altérations cellulaires provoquées par des ultra-sons de faible intensité. *Rev. Cyt. Biol. Vég.* 16(3/4): 407-413. (incl. *Spirogyra*)
- PHILLIPS, J. N., Jr. (Abstr.) Observations on isolated *Chlorella* cells. *Pl. Physiol.* 30(suppl.): viii. Au (growth rate)
- PHYCOLOGICAL BULLETIN. No. 3. The British Phycological Society. Elsie Conway, ed. 39 pp. N (incl. reports of annual meetings, abstracts of papers, and list of members)
- PHILAI, V. K. Utilization of natural byproducts for the cultivation of blue-green algae. *Current Sc.* 24(1): 21-23. Ja
- . Observations on the ionic composition of blue-green algae growing in saline lagoons. *Proc. Natl. Inst. Sc. India, Biol. Sc.* 21(2): 90-102. 26 Ap
- . Water-soluble constituents of *Gracilaria lichenoides*. *J. Sc. Industr. Res.* 14B(9): 474-477. S
- PINEDA, M. D. G., AND D. MONTEQUEL. Acerea de la sustancia anticoagulante de las algas rojas. *Bol. Inst. Español. Oceanogr.* no. 72. 10 pp. 10 N
- PIRSON, A. Functional aspects in mineral nutrition of green plants. *Ann. Rev. Pl. Physiol.* 6: 71-114.
- . Stoffwechsel organischer Verbindungen I. (Photosynthese.) *Fortschr. Bot.* 17: 529-577.
- PIRSON, A., AND L. BERGMANN. Manganese requirement and carbon source in *Chlorella*. *Nature* 176 (4474): 209-210. 30 Jl
- PIRSON, A., A. L. DANIEL, AND E. W. BECKER. Zur Beziehung zwischen endogener Atmung und Glucosatmung bei *Chlorella*. *Arch. Mikrobiol.* 22(2): 214-218. 22 Je
- PITELKA, D. R., AND O. N. SCHOOLEY. Comparative morphology of some protistan flagella. *Univ. Calif. Publ. Zool.* 61(2): 79-128, incl. pls. 15-26. 30 S (incl. *Ochromonas*, *Cryptomonas*, *Chilomonas*, *Dunaliella*, *Platyomonas*, *Euglena*, *Rhabdomonas*, *Peranema*, *Crithidida*, and *Bodo*)
- POBEGUIN, T. Contribution à l'étude des carbonates de calcium, précipitation du calcaire par les végétaux, comparaison avec le monde animal. *Ann. Sc. Nat. Bot. ser. 11, 15:* 29-108. F

- POCHMANN, A. *Helikotropis okteres* n. gen. n. spec. (Peranemataceae) und die Frage der Ätiologie der Kielbildung bei farblosen Eugleninen. Österr. Bot. Zeitschr. 102(1): 1-17. 29 Ap
- POCOCK, M. A. Studies in North American Volvocales. I. The genus *Gonium*. Madroño 13(2): 49-64. Ap (sp. nov.)
- . Seaweeds of the Zwartkops Estuary. S. Afr. J. Sc. 52(3): 73-75. O
- *POLIANSKII, V. J. De alga nova e genere *Calothrix* notula. Bot. Mater. Otd. Sporovskykh, Bot. Inst. Akad. Nauk SSSR 10: 17-19. 1 Ja
- *—. Species generis *Spirogyra* Link novae ad floram URSS. *Ibid.* 125-134.
- POST, E. Weitere Daten zur Verbreitung des *Bostrychictum* IV. Arch. Protistenk. 100(3): 351-377. 30 Ap. V. Ber. Deutsch. Bot. Ges. 68(5/6): 205-216. 28 Jl
- POUCQUES, M. L. de. Nouvelle contribution à l'étude de la flore algale de Lorraine: les étangs de la Forêt de la Reine. Rev. Alg. u.s. 1(4): 196-207. 8
- PRAMER, D. Absorption of antibiotics by plant cells. Sciencee 121(3145): 507-508. 8 Ap (*Nitella*)
- PRAT, S. [Die Vegetation in stark saueren Wassern und die Regeneration der Eisenmoore.] Preslia 27(3): 225-233. (inel. *Chlamydomonas*, *Euglena*)
- . [Prof. Dr. Rudolf Dostál, der Siebzigjährige.] *Ibid.* 322-326.
- . [Influence of humus-substances on algae.] Cesk. Biol. 4(9): 535-541.
- . The influence of humus substances (capueines) on algae. Folia Biol. 1(6): 321-326. 30 N (*Anabaena*, *Chlorogonium*, *Botrydiopsis*, *Scenedesmus*)
- PRESOTT, G. W. Algae of the Panama Canal and its tributaries. I. Flagellated organisms. Ohio J. Sc. 55(2): 99-121. Mr (*Eudorina*, *Euglena*, *Phaeus*, *Trachelomonas*, *Eutreptia*, sp. nov.)
- . The fresh-water algae of Montana. I. New species of Chaetophoraceae. Hydrobiologia 7(1/2): 52-59.
- 1 Je (*Draparnaldiopsis*, *Stigeoclonium*, sp. nov.)
- . (Abstr.) Ecological factors determining the distribution of freshwater algae in the Arctic. Bull. Ecol. Soc. Am. 36(3): 76. S
- PRESOTT, G. W., AND T. F. ANDREWS. A new species of *Anabropsis* in a Kansas lake with notes on limnology. Hydrobiologia 7(1/2): 60-63. 1 Je
- PRESTON, R. D. The submicroscopic structure of plant cell walls. In Ruhland, W. (ed), Handbuch der Pflanzenphysiologie 1: 731-744.
- PRINGSHEIM, E. G. Kleine Mitteilungen über Flagellaten und Algen. I. Algenartige Chrysophycean in Reinkultur. Arch. Mikrobiol. 22(1): 401-410. 18 My (*Stichochrysis*, *Pleurochrysis*, gen. nov.) II. *Euglena gracilis* var. *saccharophila* n. var., und eine vereinfachte Nährösung zur Vitamin B₁₂-Bestimmung. *Ibid.* 414-419.
- . Kleine Mitteilungen über Flagellaten und Algen. Über *Ochromonas danica* n. sp. und andere Arten der Gattung. *Ibid.* 23(2): 181-194, 22 O (morphology, physiology)
- . The genus *Polytomella*. J. Protozool. 2(4): 137-145. N (sp. nov.; inel. physiology)
- . Die "gelben Zellen" der Koralle *Cladocera*. Pubbl. Staz. Zool. Napoli 27: 5-9. D (dinophycean Zooxanthella)
- PROCTOR, V. W. (Abstr.) The role of antibiosis in the ecology of freshwater algae. Diss. Abstr. 15(11): 1990-1991. N (*Haematococcus* and other Volvocales; Univ. Missouri)
- *PROSHKINA-LAVRENKO, A. I. Relictae diatomaeae planctoni e Maris Nigri. Bot. Mater. Otd. Sporovskykh, Bot. Inst. Akad. Nauk SSSR 10: 45-54. 1 Ja
- *—. Diatomaeae novae et minus cognitiae in URSS. II. *Ibid.* 54-61. (*Achnanthes*, *Navicula*, sp. nov.)
- *—. Species *Chaetoceros* novae et curiosae Maris Nigri. II. *Ibid.* 62-69.
- *—. [N. V. Morozova-Vodyanichkaya.] Bot. Zhurn. 40(1): 287-292. 15 Mr (portrait, bibliography)

- . Algology at the Eighth International Botanical Congress, Paris. *Ibid.* 293-304.
- PROVASOLI, L., AND J. J. A. MCLAUGHLIN. (Abstr.) Auxotrophy in some marine and brackish dinoflagellates. *J. Protozool.* 2(suppl.): 10. Au
- PROWSE, G. A. The role of phytoplankton in studies on productivity. *Verh. Int. Ver. Limnol.* 12: 159-163.
- PUNNETT, T. R., Jr. Cell-free extracts of unicellular algae. A study of preparative techniques and reaction components. *Diss. Abstr.* 15(1): 28-29. Ja (Univ. Illinois)
- PUYMALY, A. de. Les hétérocystes des algues bleues: leur nature et leur rôle. *C. R. Acad. Sc.* 240(22): 2172-2174. 1 Je
- QUENNERSTEDT, N. Diatoméerna i Långans sjövegetation. Diatoms in the lake vegetation of the Långan drainage area, Jämtland, Sweden. *Aeta Phytogeogr. Suec.* 36. 208 pp.
- QUILLET, M. Sur la nature chimique de la leucosine, polysaccharide de réserve caractéristique des Chrysophycées, extraite d'*Hydrurus faetidus*. *C. R. Acad. Sc.* 240(9): 1001-1003. 28 F (renamed chrysolaminarin)
- RANSON, G. Observations sur les principaux agents de la dissolution du calcaire sous-marin, dans la zone côtière des îles coraliennes de l'Archipel des Tuamotu. *Ibid.* 240(7): 806-808. 14 F (*Porolithon*)
- . Observations, en Océanie française, sur la formation des récifs barrières et des atolls. *Ibid.* 240(8): 898-900. 21 F
- . Observations sur l'agent essentiel de la dissolution du calcaire dans les régions exondées des îles coraliennes de l'Archipel des Tuamotu. Conclusions sur le processus de la dissolution du calcaire. *Ibid.* 240(9): 1007-1009. 28 F (*Porolithon, Entophysalis*)
- . Observations sur les îles coraliennes de l'Archipel des Tuamotu (Océanie française). *Bull. Soc. Zool. France* 80(4): 272-274. 16 D
- RAO, C. B. On the distribution of algae in a group of six small ponds. II. Algal periodicity. *J. Ecol.* 43(1): 291-308. Ja
- RAYSS, T. Les algues marines des côtes palestiniennes. I. Chlorophyceae. *Bull. Sea Fish. Res. Stat. Israel* no. 9. 36 pp. S
- REAZIN, G. H., Jr. Studies on the physiology of *Ochromonas malhamensis*, a golden-brown alga. *Diss. Abstr.* 15(4): 494-495. Ap (Univ. Michigan)
- REID, G. W. New horizons in biological treatment of domestic wastes. *Public Works Mag.* 86(7): 89-90. JI (growing algae to recover organic material)
- REISNER, G. S., AND J. F. THOMPSON. (Abstr.) Mass culture of *Chlorella*, under trace element deficiency conditions. *Pl. Physiol.* 30(suppl.): xvii-xviii. Au
- REUTER, L. Protoplasmatische Pflanzenanatomie. *Protoplasmatologia XI*, 2. 131 pp.
- REZENDE-PINTO, M. de. Sur les modifications de l'état colloidal des chloroplastes (à propos de quelques observations sur *Spirogyra* et *Mougeotia*). *Brotéria* 24(1): 52-55. F
- REZENDE-PINTO, M. de, AND A. de LEMOS-PEREIRA. Über die Struktur der Chloroplasten von *Oedogonium*. *Protoplasma* 44(4): 468-469.
- RIETII, A. Bemerkungen über zwei auf Vaucherien-Fäden der Arterner Salzwiesen lebende Organismen. *Ber. Deutsch. Bot. Ges.* 68(7): 257-260. 14 O (incl. *Salpingocea*)
- RINGER, W. C., AND S. J. CAMPBELL. Use of chlorine dioxide for algae control at Philadelphia. *J. Am. Water Works Ass.* 47(8): 740-746. Au
- RODHE, W. The XIIth General Assembly of the International Association of Limnology (IAL) held in Great Britain, August 1953. Report. *Verh. Int. Ver. Limnol.* 12: 1-27.
- . Can plankton production proceed during winter darkness in subarctic lakes? *Ibid.* 117-122.
- RODIN, L. E., AND N. I. BAZILEVICH. [The cycle of ash elements and nitrogen in several desert bioocoenoses.]

- BOT, Zhurn. 40(1): 3-17. 15 Mr (brief reference to *Microcoleus*; cf. Chem. Abstr. 49: 10447)
- ROSS, R. The algae of the East African Great Lakes. Verh. Int. Ver. Limnol. 12: 320-326.
- ROUND, F. E. Some observations on the benthic algal flora of four small ponds. Arch. Hydrobiol. 50(1): 111-135. Ja
- . (Abstr.) The algae of littoral sediments in lakes. Phyc. Bull. 3: 30-32. N
- ROY, H. K. Plankton ecology of the River Hooghly at Palta, West Bengal. Ecology 36(2): 169-175. Ap
- RÜHMANN, D. Das Plankton eines Hamburger Hafenkanals. Mikrokosmos 44(10): 230-233. Jl
- RUNNSTRÖM, J., AND B. HAGSTRÖM. Studies on the action of the "Fucus fertilization inhibitor" on sea urchin egg and sperm. Exper. Cell. Res. 8(1): 1-14. F
- RUTTNER, F. Der Lanzer Mittersee, ein Quellsee mit zeitweise meromictischer Schichtung. Arch. Hydrobiol. Suppl. 22(3/4): 480-487. N
- RUZICKA, J. [Über die praktische Bedeutung der Desmidaceen.] Preslia 27(2): 170-174.
- . [Bemerkungen zur Systematik der Desmidaceen.] Ibid. 27(3): 253-271. (*Closterium*, *Penium*, *Xanthidium*)
- *—. [Interessante Desmidaceen aus Oberer Arva (Orava).] Biológia 10 (5): 590-604. (Czech with German summary)
- RYAN, F. J. Attempt to reproduce some of Moewus' experiments on *Chlamydomonas* and *Polytoma*. Science 122(3167): 470. 9 S
- RYPACEK, V. [Prof. Dr. S. Prát, der Sechzigjährige.] Preslia 27(4): 329-339. (portrait)
- RYTHIER, J. H. Ecology of autotrophic marine dinoflagellates with reference to red water conditions. In Johnson, F. H. (ed.), The luminescence of biological systems, pp. 387-413. Discussion by B. M. Sweeney on p. 414.
- . The ratio of photosynthesis to respiration in marine plankton algae and its effect upon the measurement of productivity. Deep-sea Res. 2(2): 134-139. Ja
- RZOSKA, J., A. J. BROOK, AND G. A. PROWSE. Seasonal plankton development in the White and Blue Nile near Khartoum. Verh. Int. Ver. Limnol. 12: 327-334.
- SACHET, M. II., AND F. R. FOSBERG. Island bibliographies. Natl. Acad. Sc.-Natl. Res. Council Publ. no. 335. Washington, D. C. v, 577 pp. (86.00)
- SAGER, R. Inheritance in the green alga *Chlamydomonas reinhardtii*. Genetics 40(4): 476-489. 25 Au
- . (Abstr.) Non-Mendelian inheritance in *Chlamydomonas*. Ibid. 40 (5): 594. 30 S
- SAGER, R., AND G. PALADE. (Abstr.) Studies on chloroplast structure in *Chlamydomonas*. Pl. Physiol. 30 (suppl.): xiii-xiv. Au
- SAITO, T., AND Y. ANDO. [Bromine compounds in seaweeds. I. On a bromophenolic compound obtained from the red alga, *Polysiphonia morrowii* Harv.] J. Chem. Soc. Japan, Pure Chem. Sect. 76(5): 478-479. My
- SALAH, M. M. Some new diatoms from Blakeney Point (Norfolk). Hydrobiologia 7(1/2): 88-102. 1 Je (*Eunotogramma*, *Anaulus*, *Plagiogramma*, *Campyllosira*, *Cymatosira*, *Rhoicosphenia*, *Frustulia*, *Diploneis*, *Stauroneis*, *Navicula*, *Amphora*, *Cymbalonitzschia*, *Nitschia*, sp. nov.)
- SALONEN, J. [Weitere Beobachtungen über die Wasserflora im Gebiet von Kuusamo und Salla in Nordfinnland.] Arch. Zool. Bot. Fenn. "Vanamo" 9(suppl.): 334-335. Ap (Finnish with German summary)
- SANDAN, T. Physiological studies on growth and morphogenesis of the isolated plant cell cultured in vitro. I. General feature on the growth and morphogenesis of the internodal cell of Characeae. Bot. Mag. Tokyo 68 (808): 274-280. O
- SASA, T., Y. MORIMURA, AND H. TAMIYA. Seasonal variation of growth rate of various strains of unicellular algae under natural light-and temperature-conditions. J. Gen.

- Appl. Microbiol. 1(3): 183-189. S (*Chlorella, Scenedesmus*)
- SATO, R., I. USUKI, AND K. SHIRASU. On the limnological conditions and the spawning nests of landlocked sockeye salmon in Lake Tsurumai. Ecol. Rev. 14(1): 59-67.
- SATOW, T. A new trial of measuring the habitat of the seaweeds quantitatively. J. Shimonoseki Coll. Fish. 4(2): 253-270. Mr
- SAWADA, T. Some observations on *Sargassum filicinum* Harvey. Se. Bull. Fae. Agr. Kyushu Univ. 15(1): 71-76. F
- SCHADEN, H. Die Schraubenalge *Spirogyra*. Mikrokosmos 44(9): 211-213. Je
- . Die Zieralge *Closterium*. Ibid. 45(1): 19-22. O
- SCHAECHTER, M., AND E. D. DELAMATER. Mitosis of *Chlamydomonas*. Am. J. Bot. 42(5): 417-422. 5 My
- SCHANDERL, H. Studien über die Körpertemperatur submerser Wasserpflanzen. Ber. Deutsch. Bot. Ges. 68(1): 28-34. 28 F (incl. *Cladophora*, *Oedogonium*)
- SCHIEELE, M. Die Massenentwicklung salzliebender planktischer Kieselalgenarten in Werra und Weser. Arch. Hydrobiol. 51(2): 161-171. N
- SCHILLER, J. Untersuchungen an den planktischen Protophyten des Neusiedlersees 1950-1954, I. Teil, Wissenschaftliche Arbeiten aus dem Burgenland, Heft 9. 66 pp., 13 pls. (*Amphidinium*, *Gymnodinium*, *Massartia*, *Gyrodinium*, *Glenodinium*, *Peridinium*, *Exuviaella*, *Prorocentrum*, sp. nov.)
- SCHMITZ, W. Phytoplankton-Massenentwicklung in Stauseen und Fließgewässern. Verh. Int. Ver. Limnol. 12: 241-252.
- SCHMOLINSKY, F. Strahlungsuntersuchungen in Binnengewässern mit einigen Ergebnissen aus Seen im Hochschwartzwald und in der Schweiz. Ibid. 134-140.
- SCHOENBORN, H. W., AND R. J. GIBSON. (Abstr.) Growth characteristics of *Astasia longa* clones derived from irradiated cells. J. Protozool. 2(suppl.): 2. Au
- SCHÖN, W. J. Periodische Schwankungen der Photosynthese und Atmung bei *Hydrodictyon*. Flora 142 (3): 347-380. 30 Jl
- SCHULZ, G. Bewegungsstudien sowie elektronenmikroskopische Membranuntersuchungen an Cyanophyceen. Arch. Mikrobiol. 21(4): 335-370. 27 Ap
- SCHUSSNIG, B. Systematik und Phylogenie der Algen. Fortschr. Bot. 17: 118-210.
- . Eine neue Protozoocallen-Gattung. Österreich. Bot. Zeitschr. 102 (4/5): 444-459. 26 O (*Rhopalocystis*, gen. nov.)
- . Eine apomeiotische Mutante von *Cladophora utriculosa* Kützg. Pubbl. Staz. Zool. Napoli 27: 377-390. D
- SCHWARTZ, M. The quantum efficiency of the photochemical reduction of quinone and ferricyanide by lyophilized and whole *Chlorella* cells. Arch. Biochem. Biophys. 59(1): 5-16. N
- SCHWIMMER, M., AND D. SCHWIMMER. The role of algae and plankton in medicine. Grune and Stratton, N. Y. x, 85 pp.
- SCOTT, D. H., AND C. T. INGOLD. Flowerless plants. Ed. 12. A. & C. Black, London. xiv, 170 pp. (algae: pp. 94-121)
- SCOTT, G. T., AND H. R. HAYWOOD. Sodium and potassium regulation in *Ulva lactuca* and *Valonia macrophysa*. In Shanes, A. M. (ed.), Electrolytes in biological systems, pp. 35-64.
- SCOTT, R., AND L. E. ERICSON. Some aspects of cobalt metabolism by *Rhodymenia palmata* with particular reference to vitamin B₁₂ content. J. Exper. Bot. 6(18): 348-361. O
- SEGAWA, S. Systematic anatomy of the articulated corallines (supplementary report). The structure and reproduction of *Yamadaia melobesioides* Segawa. Bot. Mag. Tokyo 68 (807): 241-247. S (gen. nov.)
- SEGAWA, S., E. OGATA, AND T. SAWADA. Studies on the carpospore liberation in *Gracilaria verrucosa* (Huds.) Papenfuss. I. Carpospore liberation accompanied with the half-drying. Se. Bull. Fae. Agr. Kyushu

- Univ. 15(2): 235-243. Mr. II. On the mechanism of carpospore liberation. *Ibid.* 245-254.
- SEGI, T. The species of the genus *Gelidium* from Japan and its vicinity (I). Rep. Ene. Fish. Pref. Univ. Mie 2(1): 124-137. 30 O
- SEGI, T., AND W. GOTO. On the planospores of *Monostroma latissimum* (Kütz.) Wittrock. Bull. Jap. Soc. Phyc. 3(1): 1-5. My
- SELBY, C. H. (Abstr.) The distribution of the genus *Coleochaete* (Bréb.) in the English Lake District. Phyc. Bull. 3: 33-34. N
- SEMINA, G. I. [On two zonal groupings of phytoplankton (as exemplified by the Bering Sea).] Dokl. Akad. Nauk SSSR 101(2): 363-366. 11 Mr
- . [In regard to the vertical distribution of phytoplankton in the Bering Sea.] *Ibid.* 101(5): 947-949. 11 Ap
- SERENKOV, G. P., AND M. V. PAKHOMOVA. [The nitrogenous complex of some species of diatoms.] Vestnik Moskov. Univ. 10(12): 133-142. (*Thalassiosira*; cf. Chem. Abstr. 50: 8811)
- SERPETTE, M. Contribution à l'étude des Cyanophyées de l'Afrique-occidentale. Bull. Inst. Franç. Afr. Noire, Sc. Nat. 17(3): 769-804. J1 (*Lyngbya*, sp. nov.; incl. ecology)
- SERRA, J. A. Fine structure of the nucleus. In Ruhland, W. (ed.), Handbuch der Pflanzenphysiologie 1: 445-471.
- SETLIK, I. [Resistance of thermal blue-green algae to liquid air temperature.] Preslia 27(4): 411-416.
- SEWELL, R. B. S. A study of the sea coast of southern Arabia. Proc. Linn. Soc. London 165(2): 188-210. Je (incl. phytoplankton)
- SHEN, Y. F. Phytoplankton collected from the University Pond, in the experimental forest of Taiwan University at Ch'i-T'ou. Taiwania 6: 13-22. D (*Tetradesmus*, sp. nov.)
- . A study of a unicellular culture of *Geminella interrupta*. *Ibid.* 23-26. (morphology, phylogeny)
- SHESHUKOVA-PORETSKAYA, V. S. [History of internal waters of Trans-Ural areas on the basis of their diatomaceous flora. II.] Uchen. Zap. Leningrad Univ. 191: 105-162. 28 N (*Navicula*, *Nitzschia*, sp. nov.)
- . [The diatoms of marine inter-moraine deposits in the European part of USSR.] *Ibid.* 163-197.
- SHILO, Moshe, AND Miriam SHILO. Control of the phytoflagellate *Prymnesium parvum*. Verh. Int. Ver. Limnol. 12: 233-240.
- SHOJI, S. On the synecological observation of micro-organism communities in some tidewater rock-pools, with special reference to the morphological variation of the larva of a mosquito, *Aedes togoi* Theobald. Ecol. Rev. 14(1): 91-98. Mr
- SILVA, P. C. The identity of *Hydrodyclium marinum* Bory. Rev. Alg. n.s. 1(4): 179-180. S
- . The dichotomous species of *Codium* in Britain. J. Mar. Biol. Ass. U. K. 34(3): 565-577. O
- SIMONIS, W. Weitere Untersuchungen über Phosphathaushalt und Photosynthese. Ber. Deutseh. Bot. Ges. 67 (Schlussheft): (7)-(8). 7 J1 (*Ankistrodesmus*, *Chlorella*)
- SINGII, K. P. Studies in the genus *Trachelomonas* Ehrbg. Diss. Abstr. 15(8): 1301-1302. Au (morphology; Vanderbilt Univ.)
- SINGII, R. N. Limnological relations of Indian inland waters with special reference to waterblooms. Verh. Int. Ver. Limnol. 12: 831-836.
- STOHL, H. Bemerkungen zum erstmaligen Fund eines Charophyten im Amazonengebiet. Arch. Hydrobiol. 50(2): 153-159. Ap
- *SKABICHESKII, A. P. De specie nova e genere *Diatoma* DC. Bot. Mater. Otd. Sporovych, Bot. Inst. Akad. Nauk SSSR 10: 42-45. 1 Ja
- SKADOVSKII, S. N., M. A. MESSINEVA, AND V. I. USPENSKAYA. [Study of organisms causing the appearance and disappearance of smells and abnormal tastes in water. I.] Trudy Vses. Gidrobiol. Obschesh. 6: 23-37. (incl. *Oscillatoria*)
- SKOPINTSEV, B. A., AND L. P. KRYLOVA. [Results of a study of some problems of the dynamics of organic

- matter in natural waters.] *Ibid.* 38: 45. (*Aphanizomenon*, *Oscillatoria*, *Pediastrum*)
- SLATNER, J. V. Some observations on the cultivation and sterilization of protozoa. *Trans. Am. Microsc. Soc.* 74 (1): 80-85. Ja (*Euglena*)
- SMALL, J. The pH of plant cells. *Protoplasmatologia* II, B, 2C. 116 pp.
- SMITH, D. B., A. N. O'NEILL, AND A. S. PERLIN. Studies in the heterogeneity of carrageenin. *Can. J. Chem.* 33(8): 1352-1360. Au
- SMITH, D. G., AND E. G. YOUNG. The combined amino acids in several species of marine algae. *J. Biol. Chem.* 217(2): 845-853. D (*Ascophyllum*, *Fucus*, *Rhodymenia*, *Ulva*, *Chondrus*)
- SMITH, J. H. C., AND A. BENITEZ. Chlorophylls: analysis in plant materials. In Pacek, K., and M. V. Tracey (ed.), *Modern methods of plant analysis* 4: 142-196.
- SMITH, J. H. C., AND C. S. FRENCH. Herman Augustus Spoehr, 1885-1954. *Ann. Rev. Biochem.* 24: xi-xvi. Jl (portrait)
- SMITH, R. L., AND W. SUBBY. Control of fertilizing minerals in sewage plant effluents. *Public Works Mag.* 86(2): 91-92. F (removal of algae from lakes)
- SMYTH, J. C. A study of the benthic diatoms of Loch Sween (Argyll). *J. Ecol.* 43(1): 149-171. Ja
- SÖDERSTRÖM, J. Some drawings of *Cladophora*. *Svensk Bot. Tidskr.* 49 (1/2): 275-281. 20 Ap
- SOLDO, A. T. Vitamin B₁₂ and nucleic acid production in *Euglena*. *Arch. Biochem. Biophys.* 55(1): 71-76. Mr
- SPARROW, F. K., AND M. E. BARR. Additions to the phycomycete flora of the Douglas Lake region. I. New taxa and records. *Mycologia* 47(4): 546-556. 27 Au (*Zygnema*, *Gloeodinium*, *Oedogonium*, desmids as hosts)
- SPARROW, F. K., AND R. A. PATERSON. A note concerning *Rhizidiospisis* and *Podochytrium*. *Ibid.* 47(2): 272-274. 29 Ap (*Microcoleus* as host)
- SPONSLER, O. L., AND J. D. BATH. Some features of *Nitella* chloroplasts as revealed by the electron microscope. *Protoplasma* 44(3): 332-335.
- STARR, R. C. (Abstr.) Some aspects of sexuality and genetics of *Cosmarium botrytis* Meneghini. *Proc. Indiana Acad. Sc.* 64: 56.
- . A comparative study of *Chlorococcum* Meneghini and other spherical, zoospore-producing genera of the Chlorococcales. *Indiana Univ. Publ. Sc. Ser.* no. 20. vii, 111 pp. (*Spongiochloris*, *Neochloris*, gen. nov.)
- . Sexuality in *Gonium sociale* (Dujardin) Warming. *J. Tenn Acad. Sc.* 30(2): 90-93. Ap
- . Zygospore germination in *Cosmarium botrytis* var. *subtumidum*. *Am. J. Bot.* 42(7): 577-581. 12 Jl
- . Isolation of sexual strains of placoderm desmids. *Bull. Torrey Bot. Club* 82(4): 261-265. 20 Jl
- STEEL, E. W., AND E. F. GLOYNA. Oxidation ponds—radioactivity uptake and algae concentration. U. S. Atomic Energy Comm. WASH-275: 10-37. [Au]
- . Concentration of radioactivity in oxidation ponds. *Sewage Ind. Wastes* 27(8): 941-956. Au
- STEEMANN NIELSEN, E. Influence of pH on the respiration in *Chlorella pyrenoidosa*. *Physiol. Pl.* 8(1): 106-115.
- . Carbon dioxide as carbon source and narcotic in photosynthesis and growth of *Chlorella pyrenoidosa*. *Ibid.* 8(2): 317-335.
- . The interaction of photosynthesis and respiration and its importance for the determination of ¹⁴C-discrimination in photosynthesis. *Ibid.* 8(4): 945-953. (*Chlorella*)
- . The production of antibiotics by plankton algae and its effect upon bacterial activities in the sea. *Deep-sea Res.* 3(suppl.): 281-286.
- . The production of organic matter by the phytoplankton in a Danish lake receiving extraordinarily great amounts of nutrient salts. *Hydrobiologia* 7(1/2): 68-74. 1 Je
- . An effect of antibiotics produced by plankton algae. *Nature* 176

- (4481: 553, 17 S (*Chlorella*, *Thalassiosira*)
- . Production of organic matter in the oceans. *J. Mar. Res.* 14(4): 374-386, 31 D
- STEFFEN, K. Entwicklungsgeschichte und Fortpflanzung. *Fortschr. Bot.* 17: 51-106.
- STEFFEN, K., AND F. WALTER. Licht- und elektronenoptische Untersuchungen über den Feinbau des Chromatophors von *Ankistrodesmus braunii* (Nägeli) Brunthaler. *Planta* 45(4): 395-404, 16 My
- STICH, H. Synthese und Abbau der Polyphosphate von *Aetabularia* nach autoradiographischen Untersuchungen des 32 P-Stoffwechsels. *Zeitschr. Naturf.* 10h(5): 281-284, My
- STOKSTAD, E. L. R., H. P. BROQUIST, AND N. H. SLOANE. Nutrition of microorganisms. *Ann. Rev. Microbiol.* 9: 111-144.
- STOSCHI, H. A. von. Pennate Diatoms. *Zeitschr. Bot.* 43(1): 89-99. (review of recent literature)
- . Ein morphologischer Phasenwechsel bei einer Coccoolithophoride. *Naturwissenschaften* 42(14): 423, Jl
- SUBLETTE, J. E. The physio-chemical and biological features of Lake Texoma (Denison Reservoir), Oklahoma and Texas: a preliminary study. *Texas J. Se.* 7(2): 164-182, Je
- SULIT, J. L., AND R. C. SAN JUAN. Studies on the extraction of alginic acid from some species of Philippine *Sargassum*. *Philippine J. Fish.* 3 (1): 47-51.
- SUXENA, M. R. Fresh-water Euglenineae from Hyderabad, India—I. *J. Ind. Bot. Soc.* 34(4): 429-450. (*Notosolenus*, sp. nov.)
- SUZUKI, N. Studies on the manufacture of algin from brown algae. *Mem. Fac. Fish. Hokkaido Univ.* 3 (2): 93-158, D
- SYRETT, P. J. The assimilation of ammonia and nitrate by nitrogen-starved cells of *Chlorella vulgaris*. I. The assimilation of small quantities of nitrogen. *Physiol. Pl.* 8(4): 924-929.
- TAKAGI, M., AND K. MURATA. Studies on the mechanism of nitrogen assimilation in marine algae. VI. The variation of nitrate reductase activity according to the portions and to the frond length of some marine algae. *Bull. Fac. Fish. Hokkaido Univ.* 6(1): 25-28, My. VII. Effect of various inhibitors on nitrate reductase. *Ibid.* 29-32, VIII. On the electron carrier of nitrate reductase in *Porphyra yezoensis*. *Ibid.* 33-36.
- TAKANO, H. Plankton diatoms collected off Bōsō District in August, 1951. *Bull. Jap. Soc. Sc. Fish.* 21 (2): 55-61.
- TALLING, J. F. The light-relations of phytoplankton populations. *Verh. Int. Ver. Limnol.* 12: 141-142.
- . The relative growth rate of three plankton diatoms in relation to underwater radiation and temperature. *Ann. Bot. n.s.* 19(75): 329-341. Jl (*Asterionella*, *Fragilaria*, *Tabellaria*)
- TAMAS, G. [Quantitative plankton studies on Lake Balaton. VI. Biomass of the phytoplankton of the forties.] *Ann. Inst. Biol. Tihany* 23: 95-110, 25 S (Hungarian with English summary)
- TAMIYA, H., T. SASA, T. NIHEI, AND S. ISHIBASHI. Effect of variation of day-length, day- and night-temperatures, and intensity of daylight upon the growth of *Chlorella*. *J. Gen. Appl. Microbiol.* 1(4): 298-307, D
- TAYLOR, E. W. The reservoirs of the Metropolitan Water Board and their influence upon the character of the stored water. *Verh. Int. Ver. Limnol.* 12: 48-65. (incl. algal growth and control)
- . The control of algal growths in a small reservoir by intermittent chlorination. *Ibid.* 671-674.
- TAYLOR, F. J. Some Leicestershire algal records. *Naturalist* 85(2): 7-8, Ja/Mr
- TAYLOR, W. R. Marine algal flora of the Caribbean and its extension into neighboring seas. In University of Southern California, Essays in the natural sciences in honor of Captain Allan Hancock, pp. 259-270.

- . Notes on algae from the tropical Atlantic Ocean. IV. Pap. Mich. Acad. Se. Arts Lett. 40: 67-76. (*Microdictyon*, sp. nov.)
- TCHAN, Y. T., AND N. C. W. BEADLE. Nitrogen economy in semi-arid plant communities. Part II. The non-symbiotic nitrogen-fixing organisms. Proc. Linn. Soc. N.S.W. 80(2): 97-104. 5 O (incl. algae)
- TEILING, E. Some mesotrophic phytoplankton indicators. Verh. Int. Ver. Limnol. 12: 212-215.
- . *Peridinium galunense* Nyg. i Sverige. (*Peridinium galunense* Nyg. in Sweden.) Svensk Bot. Tidskr. 49 (1/2): 240-246. 20 Ap
- THIELE, H., AND G. ANDERSEN. Ionotrope Gele von Polyuronsäuren. III. Alginat und Pektin in nativen organisierten Gelen. Kolloid-Zeitschr. 143(1): 21-31. Au
- THIENEMANN, A. Die Binnengewässer in Natur und Kultur. Eine Einführung in die theoretische und angewandte Limnologie. Springer-Verlag, Berlin. viii, 156 pp.
- THOMAS, E. A. Sedimentation in oligotrophic and eutrophic Seen als Ausdruck der Productivität. Verh. Int. Ver. Limnol. 12: 383-393.
- THOMAS, J. B. Structure and function of the chloroplast. Progr. Biophys. 5: 109-139.
- THOMAS, J. B., AND A. M. J. HAANS. Photosynthetic activity of fragments of *Spirogyra* chloroplasts. Biochim. Biophys. Acta 18(2): 286-288. O
- THOMAS, J. B., AND W. de ROVER. On phycocyanin participation in the Hill reaction of the blue-green alga *Synechococcus cedrorum*. *Ibid.* 16 (3): 391-395. Mr
- *THOMAS, L. Observaciones sobre la ecología de las formas *Asparagopsis armata*-*Falkenbergia rufolanosa* y un nuevo órgano de reproducción. Coll. Bot. 4: 399-407; 409-412.
- THOMAS, M. D. Effect of ecological factors on photosynthesis. Ann. Rev. Pl. Physiol. 6: 135-156.
- THOMAS, W. H. (Abstr.) Heterotrophic nutrition and respiration of *Gonyaulax polyedra*. J. Protozool. 2(suppl.): 2-3. Au
- THOMAS, W. H., AND R. W. KRAUSS. Nitrogen metabolism in *Scenedesmus* as affected by environmental changes. Pl. Physiol. 39(2): 113-122. Mr
- THOMASSON, K. Studies on South American fresh-water plankton. 3. Plankton from Tierra del Fuego and Valdivia. Acta Hort. Gotoburg. 19 (6): 193-225. 18 Ap (*Staurastrum*, sp. nov.)
- . A plankton sample from Lake Victoria. Svensk Bot. Tidskr. 49 (1/2): 259-274. 20 Ap (*Staurastrum*, sp. nov.)
- THOMPSON, T. G., AND T. J. CHOW. The strontium-calcium atom ratio in carbonate-secreting marine organisms. Deep-sea Res. 3(suppl.): 20-39. (incl. marine algae)
- *TIBBS, J. The nature of the algal flagellum. Résumés Comm. 3^e Congr. Int. Biochim. 79. (*Polytoma*)
- TIFFANY, L. H. Geographic distribution of the North American species of the Oedogoniaeae. Am. J. Bot. 42(3): 293-296. 16 Mr
- TOBLER, F. Flechtenähnliche Symbiose einer Polyporaceac mit Algen. Ber. Deutsch. Bot. Ges. 67(10): 406-409. 27 Ja
- TOLBERT, N. E. Excretion of glycolic acid by algae during photosynthesis. Fed. Proc. 14(1): 292-293. Mr (*Chlorella*)
- TONG, W., AND J. L. CHAIKOFF. Metabolism of I³⁵ by the marine alga, *Nereocystis tuetkeana*. J. Biol. Chem. 215(2): 473-484. Au
- TSENG, C. K., AND T. J. CHANG. Studies on *Porphyra*. II. On the *Conchoecelis*-phase of *Porphyra tenera* Kjellm. and its conchospores. Acta Bot. Sin. 4(1): 27-46. Mr. III. Sexual reproduction of *Porphyra*. *Ibid.* 4(2): 153-166. Je (Chinese with English summary)
- . A revision of the life cycle diagram of *Porphyra tenera* Kjellm. *Ibid.* 4(3): 265-268. S (Chinese with English summary)
- . Studies on the life history of *Porphyra tenera* Kjellm. Sc. Sin. 4 (3): 375-398. S
- TSENG, C. K., K. Y. SUN, AND C. Y. WU. On the cultivation of Haitai

- (*Laminaria japonica* Arcsch.) by summering young sporophytes at low temperature. *Acta Bot. Sin.* 4(3): 255-264. S (Chinese with English summary)
- . Studies on fertilizer application in the cultivation of Haitai (*Laminaria japonica* Arcsch.). *Ibid.* 4(4): 375-392. D (Chinese with English summary)
- TSUCHIYA, Y., AND Y. SUZUKI. Free amino acids in the laver, *Porphyra tenera* K. *Bull. Jap. Soc. Se. Fish.* 20(12): 1092-1098.
- TSUJITA, T. Comparative studies on the Red Tide appearing in the waters adjacent to Western Japan. *Rec. Oceanogr. Works Japan n.s.* 2(3): 19-27. O
- . Studies on naturally occurring suspended organic matter in the water adjacent to Japan (III). On a process of organization of planktonic organic matter as examined by the electron microscope. *J. Oceanogr. Soc. Japan* 11(4): 199-203. D
- TSUMURA, K., AND Y. IWAIHASHI. Revizio pri Latinaj nomoj de diatom, *Achnanthes crenulata*, *Ach. subcrenulata* kaj *Ach. repanda*. *Bull. Jap. Soc. Phyc.* 3(3): 57-66. D
- UEHLINGER, V., AND F. CHODAT. Influence d'intensités lumineuses variées sur la croissance, le titre en chlorophylle et le pouvoir photosynthétique d'une algue unicellulaire. *Arch. Se.* 8(2): 187-198. (*Diplosphaera*)
- ULUBEKOVA, M. V. [Study of photosynthesis in green algae by means of C¹⁴.] *Dokl. Akad. Nauk SSSR* 104 (3): 491-493. 21 S (*Scenedesmus*, *Chlorella*, cf. *Chem. Abstr.* 50: 5850)
- ULVJENEN, A. Die Armleuchteralgen (Characeae) an der Meeresküste von Kymenlaakso. *Arch. Soe. Zool. Bot. Fenn.* "Vanamo" 9(suppl.): 386-395. Ap
- UMEZAKI, I. Marine Cyanophyceae from the Shima Peninsula 1. *J. Jap. Bot.* 30(2): 57-62. F [corrections, *ibid.* 30(7): 214] 2. *Ibid.* 30(7): 209-214. J1
- . Some marine Cyanophyceae of the Tokara Islands. *Bot. Mag. Tokyo*
- 68(801): 63-70. Mr (*Lyngbya*, sp. nov.)
- . A developmental study of the frond of *Brachythrixia quoyi* (Ag.) Born. & Flah. *Acta Phytotax. Geobot.* 16(2): 56-62. O
- URI, N. Free radical intermediates in photosynthesis. *Biochim. Biophys. Acta* 18(2): 209-215. O (*Chlorella*, *Scenedesmus*)
- URI, W. Resistenz von Desmidiaeen gegen Schwermetallsalze. *Sitzungsber. Österr. Akad. Wiss. Math.-Nat. Kl. Abt. I*, 164(4/5): 207-230.
- VAAS, K. F., AND M. SACHILAN. Limnological studies on diurnal fluctuations in shallow ponds in Indonesia. *Verh. Int. Ver. Limnol.* 12: 309-319.
- VALLMITJANA, L. Observaciones sobre los cilios y otras estructuras de los protozoos. *Publ. Inst. Biol. Apl.* 20: 5-15. An (incl. *Chilomonas*)
- VALSAN, A. P. Alginic acid content of some of the common seaweeds of the Gulf of Mannar area. *Current Sc.* 24(10): 343-345. O
- VAN DER WERFF, A. The biological results of fen-cleaning in the south-eastern part of the Netherlands. *Verh. Int. Ver. Limnol.* 12: 263-267.
- . A new method of concentrating and cleaning diatoms and other organisms. *Ibid.* 276-277.
- VAN NIEL, C. B. Classification and taxonomy of the bacteria and blue-green algae. In California Academy of Sciences, A century of progress in the natural sciences, 1853-1953, pp. 89-114. 20 O
- VILLERET, S. Sur la présence des enzymes des nréides glyoxyliques chez les algues d'eau douce. *C. R. Acad. Se.* 241(1): 90-92. 4 J1
- . Contribution à la biologie des algues des tourbières à Sphagnes. *Bull. Soc. Se. Bretagne* 29(fase, hors série): 5-246. 25 Ap
- . La végétation algale de la tourbière de Nesnay en Plounéour (Finistère). *Ibid.* 29(1/4): 17-31. 25 O
- . Contributions à la biologie des algues des tourbières à Sphagnes. *Ibid.* 32.
- . Sur la présence, en Bretagne, de deux algues d'eau douce réputées

- rares, *Cyclonexis annularis* Stokes et *Glococtaenium loitlesbergerianum* Haug. *Ibid.* 33-40.
- . La répartition des algues dans quelques tourbières à Sphaignes et les facteurs physico-chimiques du milieu. *C. R. Soc. Biogéogr.* 32: 49-63. Ap/Je
- VINBERG, G. G. [Importance of photosynthesis for the enrichment of water by oxygen in self-purification of contaminated waters.] *Trudy Vses. Gidrobiol. Obshch.* 6: 46-69 (*Euglena, Phacus, Spondylomorium*)
- VINYARD, W. C. Epizoophytic algae from mollusks, turtles and fish in Oklahoma. *Proc. Okla. Acad. Se.* 34: 63-65. Ja
- VISCHIER, W. *Porphyridium cruentum* (Ag.) Naeg. und die Bewegungen seiner Monosporen. *Ber. Schweiz. Bot. Ges.* 65: 459-473 D
- . Über eine neue Grünalgengattung, *Jaagia* (*Chlorellopsis* Zeitzer non Reis), aus der Gruppe der Chlorococcales. *Ibid.* 511-518.
- VISHNIAC, W. Biochemical aspects of photosynthesis. *Ann. Rev. Pl. Physiol.* 6: 115-134.
- VOGEL, S. Niederen "Fensterpflanzen" in der südafrikanischen Wüste. Eine ökologische Schilderung. *Beitr. Biol. Pflanzen* 31(1): 45-135. (*Aphanocapsa, Myxosarcina, Coccomyxa*, sp. nov.)
- VOllenweider, R. A. Zur Produktivität eines kleinen eutrophen Gewässers (Rotsee bei Luzern). *Verh. Int. Ver. Limnol.* 12: 143.
- VOSS, G. L., AND N. A. VOSS. An ecological survey of Soldier Key, Biscayne Bay, Florida. *Bull. Mar. Se. Gulf Carib.* 5(3): 203-229. S
- VOTINTSEV, K. K. [Silicon cycle in Lake Baikal.] *Trudy Vses. Gidrobiol. Obshch.* 6: 70-79. (*Melosira baicalensis*; cf. *Chem. Abstr.* 50: 14151.)
- . [The vertical distribution and seasonal dynamics of organic matter in the waters of Lake Baikal.] *Dokl. Akad. Nauk SSSR* 101(2): 359-362. 11 Mr (cf. *Chem. Abstr.* 50: 2899)
- VULKANOV, A. [Notizen über die Alge *Pithophora kewensis* Wittrock.] *Izv. Bot. Inst. Bulg. Akad. Nauk.* 4: 119-125. (Bulgarian with German summary)
- WADA, T., M. NOMURA, H. MITSUI, B. MARUO, H. TAMIYA, AND S. AKABORI. Biosynthesis of C^{14} -labeled amino acids by *Chlorella ellipsoidea*. *J. Gen. Appl. Microbiol.* 1(2): 142-151. Mr
- WAI, N. Effects of some antiseptics on the growth of *Chlorella*. *Physiol. Pl.* 8(1): 71-73.
- WALKER, F. T. A sub-littoral survey of the Laminariaceae of Little Loch Broom. *Trans. Proc. Bot. Soc. Edinburgh* 36(4): 305-308.
- WALKER, F. T., AND W. D. RICHARDSON. An ecological investigation of *Laminaria cloustoni* Edm. (*L. hyperborea* Fosl.) around Scotland. *J. Ecol.* 43(1): 26-38. Ja
- WALKER, J. B. Canavanine and homarginine as antimetabolites of arginine and lysine in yeast and algae. *J. Biol. Chem.* 212(1): 207-215. Ja (*Chlorella, Selenastrum*)
- WALKER, N. A. Microelectrode experiments on *Nitella*. *Austral. J. Biol. Sc.* 8(4): 476-489. N
- WALLACE, N. M. The effect of temperature on the growth of some freshwater diatoms. *Not. Nat. Acad. Nat. Se. Philadelphia* no. 280. 11 pp. 12 Au
- WARBURG, O. Photodissociation und induzierte Atmung, die Fundamental-Reaktionen der Photosynthese. *Naturwissenschaften* 42(16): 449-450. Au (*Chlorella*)
- . Experimente über Photosynthese. *Mitt. Max-Planck-Ges.* 1955 (1): 176-182. S (*Chlorella*)
- . Über die Messung des Energieumsatzes bei der Photosynthese mit dem Grossflächen-Bolometer. *Biochim. Biophys. Acta* 18(1): 163-164. S (*Chlorella*)
- WARBURG, O., AND G. KRIPPAHL. Carotinoid als Wirkungsgruppe eines Photosynthese-Ferments. *Ann. Acad. Se. Fenn. A, II*, 60: 69-72. Ja (*Chlorella*)
- . Photochemische Wasserersetzung durch lebende *Chlorella*. *Zeitschr. Naturf.* 10b(6): 301-304. Je

- . Wirkungsspektrum eines Photosynthese-Ferments. *Pubbl. Staz. Zool. Napoli* 27: 1-4. D (*Chlorella*)
- WARBURG, O., G. KRIPPAHL, AND W. BUCHHOLZ. Wirkung von Vanadium auf die Photosynthese. *Zeitschr. Naturf.* 10b(7): 422. J1 (*Chlorella*)
- WARBURG, O., G. KRIPPAHL, AND W. SCHRÖDER. Wirkungsspektrum eines Photosynthese-Ferments. *Ibid.* 10b(11): 631-639. N (*Chlorella*)
- WARBURG, O., AND W. SCHRÖDER. Versuche über die Sauerstoffkapazität der *Chlorella*. *Ibid.* 639-642.
- WARDLAW, C. W. Embryogenesis in plants. Methuen & Co., London. ix, 381 pp. (algae: pp. 40-62)
- WATANABE, A., R. ITO, AND T. SASA. Micro-algae as a source of nutrients for daphnids. *J. Gen. Appl. Microbiol.* 1(2): 137-141. Mr (*Chlorella*, *Scenedesmus*, *Chlamydomonas*, *Nostoc*, *Tolyphothrix*)
- . Effect of various chemicals upon the growth of daphnids. *Ibid.* 1(3): 190-193. S (incl. effect on *Tolyphothrix*)
- WAUTIER, J. Recherches expérimentales sur la membrane biologique des filtres à sable submergé. *Verh. Int. Ver. Limnol.* 12: 675-678. (incl. control of algae on sand filter)
- WAWRUK, F. Hochgebirgs-Kleingewässer im Arlberggebiet. II. *Sitzungsber. Österr. Akad. Wiss. Math.-Natur. Kl. Abt. I*, 164(6/7): 367-387.
- . Die jahreszeitlichen Aspekte im Pelagial der Seebachläcke. *Österr. Bot. Zeitschr.* 102(2/3): 301-216. 3 An
- WEATHERLEY, A., AND A. G. NICHOLLS. The effects of artificial enrichment of a lake. *Anstral. J. Mar. Freshwater Res.* 6(3): 443-468. O (incl. phytoplankton)
- WEBBER, M. L. Exchanging photomicrographs of diatoms. *J. Quakert Mier. Club*, ser. 4, 4(4): 218. Au
- *WEINBERG, E. D. Further studies on metallo-ion reversal of oxytetracycline; reactivation of drug-inactivated cells by Mg. *Antibiotics Ann.* 2: 169-173.
- WEIS, D. S. (Abstr.) The effect of glutamate on the oxidation of glucose by photosynthesizing cells of *Ochromonas malhamensis* Pringsheim. *Bact. Proc.* 1955: 140.
- . (Abstr.) Endogenous reserves in *Ochromonas malhamensis*. *J. Protozool.* 2(suppl.): 8-9. Au
- WELLENKAMP, J. O. Treasure from the sea. *Org. Gard. Farm.* 2(3): 52-53. Mr (seaweed as fertilizer)
- WELLER, J. M. Protista: non-plants, non-animals? *J. Paleontol.* 29(4): 707-710. J1
- WERZ, G. Kernphysiologische Untersuchungen an *Acetabularia*. *Planta* 46(2): 113-153. 19 O
- WESTLAKE, D. F. (Abstr.) The Freshwater Biological Association Pollution Unit. *Phye. Bull.* 3: 29-30. N
- WETHERELL, D. F., AND R. W. KRAUSS. Nutritional mutation in *Chlamydomonas*. *Carnegie Inst. Wash. Year Book* 54: 168-170. 9 D
- WETTSTEIN, D. von. Development and division of plant-chromatophores. In *Fine structure of cells. Symposium held at the VIIIth Congress of Cell Biology*, Leiden 1954. I.U.B.S. Pp. 305-306. (*Fucus*)
- WHIELAN, W. J. Starch, glycogen, fructosans and similar polysaccharides. In Pacek, K., and M. V. Tracey (ed.), *Modern methods of plant analysis* 2: 145-196.
- *WIHTTINGHAM, C. P. Induction phenomena in photosynthesis at low partial pressures of oxygen. *Résumés Comm. 3^e Congr. Int. Biochim.* 103. (*Chlorella*)
- . Energy transformation in photosynthesis and the relation of photosynthesis to respiration. *Biol. Rev.* 30(1): 49-64. F (*Chlorella*)
- . Photosynthesis. *Endeavour* 14 (56): 173-180. O
- WICHTERMAN, R. (Abstr.) Survival and other effects following X-irradiation of the flagellate, *Euglena gracilis*. *Biol. Bull.* 109(3): 371. D
- WILLIAMS, L. G. Can sewage be converted to human food? *Bull. Furman Univ.* 2(2): 16-24.
- WILSON, A. T., AND M. CALVIN. The photosynthetic cycle. CO_2 dependent

- transients. J. Am. Chem. Soc. 77 (22): 5948-5957. 20 N (*Scenedesmus*)
- WILSON, K. The polarity of the cell-wall of *Valonia*. Ann. Bot. n.s. 19 (75): 289-292. Jl
- WILSON, W. B., AND A. COLLIER. Preliminary notes on the culturing of *Gymnodinium brevis* Davis. Science 121(3142): 394-395. 18 Mr
- WINTERMANS, J. F. G. M. Polyphosphate formation in *Chlorella* in relation to photosynthesis. Meded. LandbHogesch. Wageningen 55(2): 69-126.
- WINTTER, J. E., W. W. LAUTER, AND P. A. FOOTE. Derivatives of alginic acid. J. Am. Pharm. Ass. 44(1): 48-51. Ja
- WISE, D. L. Carbon sources for *Polytomella cacca*. J. Protozool. 2(4): 156-158. N
- WITT, H. T. Kurzzeitige Absorptionsänderungen beim Primärprozess der Photosynthese. Naturwissenschaften 42(3): 72-73. F (*Chlorella*)
- WOLKEN, J. J., A. D. MELLON, AND C. L. GREENBLATT. Environmental factors affecting growth and chlorophyll synthesis in *Euglena*. I. Physical and chemical. II. The effectiveness of the spectrum for chlorophyll synthesis. J. Protozool. 2(3): 89-96. Au
- WOMERSLEY, H. B. S. New marine Chlorophyta from southern Australia. Pac. Se. 9(4): 387-395. 26 O (*Bryopsis*, *Caulerpa*, *Chlorodesmis*, *Pseudocodium*, *Cladophoropsis*, *Dasycladus*, sp. nov.)
- WOOD, E. J. F. Fluorescent microscopy in marine microbiology. J. Conseil 21(1): 6-7. O
- WOOD, R. D. Characeae. Inst. Roy. Se. Nat. Belg., Exploration hydrobiologique du Lac Tanganyika (1946-1947) 4(2): 3-13. 30 N
- WOODHEAD, N., AND R. D. TWEED. Some new Zygnemataceae. Biol. Jaarb. 22: 243-247. (*Debarya*, *Spirogyra*, *Sirogonium*, sp. nov.)
- . The freshwater algae of Anglesey and Caernarvonshire (cont.). N. West. Nat. n.s. 3(1): 76-101. Mr *Ibid.* 3(2): 210-228. Je
- WOOLEY, D. W. A naturally occurring antimetabolite of methionine in the causation of a disease. Am. J. Clin. Nutrit. 3(4): 305-310. Jl/Au (*Pseudomonas tabaci* toxin tested on *Chlorella*)
- WORT, D. J. The seasonal variation in chemical composition of *Macrocytis integrifolia* and *Nereocystis luetkeana* in British Columbia coastal waters. Can. J. Bot. 33(4): 323-340. 18 Jl
- WRIGHT, H. G. S. Plates of *Coleps* and collars of choanoflagellates. Microscope 10(9): 225-230. S/D (*Codosigia*)
- YADAVA, A. S. Some new hosts of *Cephalciros* from Bihar. Current Sc. 24(4): 124. Ap
- YAMADA, Y. [On the specimens of Japanese marine algae collected by C. P. Thunberg.] Bull. Jap. Soc. Phyc. 3(3): 81-83. D
- YAMASAKI, H. Biochemical studies on *Porphyra tenera* Kjellm. I. On the change of the catalase activity. Bull. Jap. Soc. Sc. Fish. 20(11): 1006-1009.
- YAMAZI, I. Plankton investigation in inlet waters along the east of Japan. VIII. The plankton of Miyazaki Bay in relation to the water movement. Pnbl. Seto Mar. Biol. Lab. 4(2/3): 269-284. My. XVI. The plankton of Tokyo Bay in relation to the water movement. *Ibid.* 285-309.
- YAMAZI, I., AND T. HORIBATA. Plankton investigation in inlet waters along the coast of Japan. XVIII. Seasonal succession of plankton in Taizi Bay in the years 1951-1953. *Ibid.* 321-336.
- YAPIIE, W., AND B. BAXTER. The enzymic hydrolysis of carrageenin. Appl. Microbiol. 3(6): 380-383. N
- YONEDA, Y., AND Y. YOSHIIDA. The relation between the sardine and the food plankton. I. On the food intake by *Sardinops melanosticta*. Bull. Jap. Soc. Sc. Fish. 21(2): 62-66.
- YOUNG, E. G. Importance of seaweeds. Science 122(3169): 565. 23 S (report of 2nd International Seaweed Symposium, Trondheim)