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## Phycological Literature for 1957

Compiled by P. C. SILVA

Titles of references with text in Oriental, Semitic, Slavic, or Finno-Ugric languages *without* English, French, or German summaries are translated into English and enclosed in brackets. Titles of references with text in Oriental, Semitic, Slavic, or Finno-Ugric languages *with* English, French, or German summaries are given in the language of the summary. Titles of references with text in Romance or Teutonic languages are not translated and information as to summaries in other languages usually is not given. In the code for summaries, the first symbol designates the language of the text, subsequent symbols the language of summaries. Thus, (REG) means "text in Russian with English and German summaries." Symbols include B, Bulgarian; C, Chinese; Cz, Czech; D, Danish; Du, Dutch; E, English; F, French; Fi, Finnish; G, German; H, Hebrew; I, Italian; Is, Icelandic; J, Japanese; M, Magyar; N, Norwegian; P, Polish; Pg, Portuguese; R, Russian; Ro, Romanian; S, Spanish; Se, Serbo-Croatian; Sl, Slovenian; Sw, Swedish; U, Ukrainian. References published in 1956 but unintentionally omitted from the 1956 bibliography have been included. References dealing solely with fossil algae have been omitted. References marked with asterisks have been obtained from secondary sources and have not been verified. Of numerous persons who have cooperated in this compilation, special thanks are due E. M. Burrows, T. Christensen, P. S. Dixon, B. Fott, T. Hortobágyi, A. B. Joly, R. A. Lewin, C. Rieser, B. Schussnig, and T. Segi. Major assistance was given by D. E. G. Irvine, supported by a grant from the National Science Foundation.

- . A preliminary check-list of British marine algae. Corrections and additions II. 1956. *Phyc. Bull.* 5: 36-37.
- . Mystery of the red tide. *Bull. Int. Oceanogr. Found.* 3(1): 21-31.
- ABBOTT, B. C., AND D. BALLANTINE. The toxin from *Gymnodinium veneficum* Ballantine. *J. Mar. Biol. Ass. U.K.* 36(1): 169-189.
- ABBOTT, R. S. (Abstr.) Filamentous and attached algae in southwestern Georgia, and their significance as an ecological indicator. *Diss. Abstr.* 17 (1): 20-21. (Cornell Univ.)
- ABBOTT, W. Unusual phosphorus source for plankton algae. *Ecology* 38(1): 152. (polyphosphates)
- AIRTH, R. L., AND L. R. BLINKS. Properties of phycobilins from *Porphyra naiadum*. *J. Gen. Physiol.* 41 (1): 77-90.
- AKAO, A., H. HAYASHI, T. KONDO, AND K. WATANABE. Vitamin C in Asakusa sea-weed. *Nihon Univ. Med. J.* 16(4): 1103-1107.
- AKIYAMA, M. Report on *Draparnaldiopsis* sp. found in Shakotan, Hokkaido. *Bull. Jap. Soc. Phyce.* 5(2): 57-58. (JE)
- ALBERTOVA, O. Quantitative Studie des Planktons eines Löschteiches. *Univ. Carol., Biol.* 3(2): 167-213.
- ALBRECHT, M. L., AND E. M. BURSCHKE. Fischereibiologische Untersuchungen an Fließgewässern. I. Physiographisch-biologische Studien an der Polenz. *Z. Fisch. n.s.* 6(1-7): 209-240.
- ALEEM, A. A. Succession of marine

- fouling organisms on test panels immersed in deep-water at La Jolla, California. *Hydrobiologia* 11(1): 40-58.
- ALFIMOV, N. N. [Method of determining hydrobiological productivity in the sanitary evaluation of sea water in the littoral zone.] *Bot. Zhurn.* 42(8): 1221-1224. (R) (diatoms)
- . [On the sanitary-diatom analysis of sea waters.] *Delg. S'ezd Vses. Bot. Obshch.* 1957, *Tezisy Dokl.* 5: 21-22. (R)
- ALHO, P. J. *Mischococcus confervicola* Naeg. in Finland. *Arch. Soc. Vanamo* 11(2): 111.
- AMANO, M. The distribution of plankton diatoms in relation to oceanographic conditions in the sea east of Kinkazan in 1952. *J. Oceanogr. Soc. Japan* 13(4): 145-150. (JE)
- ANDERSON, F. B., E. L. HIRST, AND D. J. MANNERS. Periodate oxidation of laminarin. *Chem. & Ind.* 1957(35): 1178.
- \*ARASAKI, S. [On the wasting diseases of cultured laver and the counterplan.] *Plant Protection* 10: 243-246. 1956. (J)
- \*———. [Studies on the breeding of the 'nori' *Porphyra tenera*. I. The races or varieties found in Ise-Mikawa Bay.] *In Univ. Tokyo, Amemiya Jub. Publ. Fish. Sc.*, pp. 805-818. (J)
- ARCE, G. (Abstr.) A study of some Chlorophyceae from Cuban soil. *Diss. Abstr.* 17(2): 219-220. (Vanderbilt Univ.)
- ARDRE, F. Florule hivernale de la Ria de Vigo. *Rev. Alg. n.s.* 3(3): 135-146.
- ARNOLD, W. Decay of the delayed light emission in *Chlorella*. *In Gaffron, H., et al.* (ed.), *Research in photosynthesis*, pp. 128-133.
- ARONOFF, S. Photosynthesis. *Bot. Rev.* 23(2): 65-107.
- . Kinetics of the photosynthetic incorporation of radiocarbon. *In Gaffron, H., et al.*, (ed.), *Research in photosynthesis*, pp. 392-398. (*Scenedesmus*)
- AUSTIN, A. P. (Abstr.) Studies in the autecology and cytology of *Furcellaria fastigiata* (L.) Lamour. *Phyc. Bull.* 5: 16-17.
- BACQ, Z. M., F. VANDERHAEGHE, J. DAMBLON, M. ERRERA, AND A. HERVE. Effets des rayons X sur *Acetabularia mediterranea*. *Exper. Cell Res.* 12(3): 639-648.
- BAHR, IL., AND W. SCHWARTZ. Vergleichende cytologische Untersuchungen an farblosen fädigen Schwefelmikroben und an hormogonalen Cyanophyceen. *Biol. Zentralbl.* 76(2): 185-203. (*Reggiatoa*, *Phormidium*, *Oscillatoria*)
- BAINBRIDGE, R. The size, shape and density of marine phytoplankton concentrations. *Biol. Rev.* 32(1): 91-115.
- BAKER, H. (Abstr.) Enhanced growth requirements of *Ochromonas malhamensis* and *Euglena gracilis* at elevated temperatures. *Diss. Abstr.* 17(2): 217. (New York Univ.)
- BALANTINE, D., AND B. C. AB-BOTT. Toxic marine flagellates; their occurrence and physiological effects on animals. *J. Gen. Microbiol.* 16(1): 274-281.
- BAMFORTH, S. S. (Abstr.) Ecological studies on the planktonic protozoa of a small artificial pond. *Diss. Abstr.* 17(12): 3130-3131. (Univ. Penn.)
- BANSE, K. Ergebnisse eines hydrographisch-produktionsbiologischen Längsschnitts durch die Ostsee im Sommer 1956. II. Die Verteilung von Sauerstoff, Phosphat und suspendierter Substanz. *Kiel. Meeresf.* 13(2): 186-201.
- BARBER, D. A., G. J. NEARY, AND R. S. RUSSELL. Radiosensitivity of salt uptake in plants. *Nature* 180(4585): 556-557. (*Chlorella*)
- BARKLEY, F. A. Algal culture notes. *Lloydia* 19(3): 150-156. (effect of various chemicals and antibiotics)
- BARNES, H. Processes of restoration and synchronization in marine ecology. The spring diatom increase and the "spawning" of the common barnacle *Balanus balanoides* (L.). *Année Biol.*, ser. 3, 33(1/2): 67-85.
- . Nutrient elements. *In Hedgpeth, J. W.* (ed.), *Treatise on ma-*

- rine ecology and paleoecology, Vol. 1, pp. 297-343.
- BARNES, H., AND G. R. HASLE. A statistical examination of the distribution of some species of dinoflagellates in the polluted inner Oslo Fjord. *Nytt Mag. Bot.* 5: 113-124.
- BARRY, V. C., AND J. E. MCCORMICK. Properties of periodate-oxidized polysaccharides. VI. The mucilage from *Dilsea edulis*. *J. Chem. Soc.* 1957: 2777-2783.
- BARTII, H. Aufnahme und Abgabe von CO<sub>2</sub> und O<sub>2</sub> bei submersen Wasserpflanzen. *Gewässer u. Abwässer* 17/18: 18-81.
- BARTHELMES, D. Zur Abgrenzung des Planktons von den Nachbarbiocoenosen. *Z. Fisch. n.s.* 6(1-7): 441-452.
- BARTSCH, A. F., AND M. O. ALLUM. Biological factors in treatment of raw sewage in artificial ponds. *Limnol. & Oceanogr.* 2(2): 77-84.
- BASLAVSKAYA, S. S. [Toward the study of photosynthesis of algae.] *Vestnik Moskov. Univ., ser. Biol., Pochvoved., Geol., Geogr.* 12(1): 97-104. (R)
- BASSHAM, J. A., AND M. CALVIN. The path of carbon in photosynthesis. Englewood Cliffs, N. J.: Prentice-Hall. x + 104 pp. (incl. *Chlorella*, *Scenedesmus*)
- BASSHAM, J. A., AND K. SHIBATA. Mechanism of the initial steps in photosynthesis. In Gaffron, H. *et al.*, (ed.), *Research in photosynthesis*, pp. 366-372. (*Scenedesmus*)
- BAUMEISTER, W. Zur Kenntnis der Dinophyceen des Seener Gebietes (I). *Arch. Protistenk.* 102(1): 1-20. (*Gymnocystodinium*, gen. nov.; *Gymnodinium*, *Cystodinium*, sp. nov.)
- . Neue Dinococcalen aus dem niederbayerischen Hügelland zwischen Isar und Inn (I). *Ibid.* 102(1): 21-43. (*Bourrellyella*, gen. nov.; *Dinastriidium*, *Stylodinium*, *Phytodine-dria*, *Cystodinium*, sp. nov.)
- BEAN, E. L. Taste and odor control at Philadelphia. *J. Am. Water Works Ass.* 49(2): 205-216.
- BECK, E. Ein weiteres Verfahren zum Einschluss von Diatomeen in Caedax 547. *Mikrokosmos* 46(8): 191-192.
- BEIN, S. J. The relationship of total phosphorus concentration in sea water to red tide blooms. *Bull. Mar. Sc. Gulf & Carib.* 7(4): 316-329.
- BEKLEMISHEV, K. V. [On the spatial relationships between marine zooplankton and phytoplankton.] *Akad. Nauk SSSR, Trudy Inst. Okeanol.* 20: 253-278. (R)
- BELCHER, J. H. B., AND E. M. F. SWALE. Some uncommon freshwater algae. *Phyc. Bull.* 5: 40-42. (*Thorea ramosissima*, *Chroothecce richterianum*, *Asterocystis*)
- BELSKY, M. M. (Abstr.) The metabolism of glucose and other sugars by the algal flagellate, *Kuglena gracilis*. *Bact. Proc.* 1957: 123-124.
- BENNINGHOFF, W. S., AND L. H. NOBLES. (Abstr.) Algal pits on marginal areas of the ice cap, northwestern Greenland. *Bull. Ecol. Soc. Am.* 38(3): 79. (*Catolthrix*, *Anacystis*)
- BENOIT, R. J. Preliminary observations on cobalt and vitamin B<sub>12</sub> in fresh water. *Limnol. & Oceanogr.* 2(3): 233-240. (*Euglena* bioassay)
- BERG, K. Professor Carl Jørgen Wengen-Lund. *Proc. Linn. Soc. London* 168(1/2): 57-60.
- BERNARD, F. Présence dans la mer Morte (Israël) d'un plancton unicellulaire de type méditerranéen. *Bull. Soc. Hist. Nat. Afr. Nord* 48(5/6): 378-384. (*Coccolithus fragilis*, *Exuviella marina*)
- . Présence des flagellés marins *Coccolithus* et *Exuviella* dans le plancton de la mer Morte. *C. R. Acad. Sc.* 245(20): 1754-1756.
- . Plancton observé durant trois plongées en bathyscaphe au large de Toulon. *Ibid.* 245(22): 1968-1971. (incl. *Coccolithus*)
- BERNHAUSER, A. Korrosionsbilder von Nostocaceen an Planorbidenschalen. *Mikroskopie* 12(1/2): 38-40.
- BERRIT, G. R. Phytoplankton dans la région de Pointe-Noire. *Annal. Biol.* 12: 125. (note)
- BESSEMYANOVA, N. P. [On the photosynthesis of some common diatoms of the Black Sea.] *Trudy Sevastopol. Biol. Stants.* 9: 30-38. (R)

- BIDWELL, R. G. S. Photosynthesis and metabolism of marine algae. I. Photosynthesis of two marine flagellates compared with *Chlorella*. *Can. J. Bot.* 35(6): 945-950. (*Olisthodiscus*, *Amphidinium*)
- BIERHUIZEN, J. F. Inhibition of growth and metabolism of *Chlorella* and some other plant types by calcium dipicrylamine and other poisons. *Meded. LandbHooges. Wageningen* 57(7): 1-59.
- BILLINGS, C. H. The operation of water treatment plants. *Public Works* 88(5): 121-134, 150-166. (incl. identification and control of algae)
- BISHOP, N. I. (Abstr.) Effects of sodium fluoride on photosynthesis. *Fed. Proc.* 16(1): 155. ("microscopic algae")
- BISWAS, B. B. Cytochemical studies on the central body of the Cyanophyceae. *Cytologia* 22(1): 90-95. (*Oscillatoria*, *Calothrix*)
- . A polysaccharide from *Nostoc muscorum*. *Sc. & Cult.* 22(12):696-697.
- BLACK, W. A. P., and F. N. WOODWARD. The value of seaweeds in animal feeding stuffs as a source of minerals, trace elements and vitamins. *Emp. J. Exper. Agr.* 25(97): 51-59.
- BLIDING, C. Studies in *Rhizoclonium*. I. Life history of two species. *Bot. Not.* 110(2): 271-275. (*R. kochianum*, *R. riparium*)
- BLINKS, L. R. Chromatic transients in photosynthesis of red algae. In Gaffron, H., et al. (ed.), *Research in photosynthesis*, pp. 444-449. (*Porphyra*)
- BLINKS, L. R., and R. L. AIRTH. Electroosmosis in *Nitella*. *J. Gen. Physiol.* 41(2): 383-396.
- BLJUMINA, L. S. [Algae of the salt lakes in the vicinity of Sol-Ietsk (Chkalov Region).] *Bot. Zhurn.* 42(6): 912-917. (R)
- BLUM, J. L. An ecological study of the algae of the Saline River, Michigan. *Hydrobiologia* 9(4): 361-408.
- BOALCH, G. T. Marine algal zonation and substratum in Beer Bay, south-east Devon. *J. Mar. Biol. Ass. U. K.* 36(3): 519-528.
- \*BOCK, O. Algenfunde aus der Rhön. *Nachr. Naturw. Mus. Aschaffenburg* 57: 93-110.
- BODDEKE, D. De zeevieren en het Deltaplan. *Natura* 54(9/10): 117-120. (Du)
- BOGORAD, L. The enzymatic synthesis of uroporphyrin precursors. In Gaffron, H. et al., (ed.), *Research in photosynthesis*, pp. 475-484. (incl. *Chlorella*)
- BOGOROV, B. G. Unification of plankton research. *Année Biol.*, ser. 3, 33(7/8): 299-315.
- BOREL, A. (Abstr.) Quelques zones de végétation facultatives sur le littoral de la région de Trébeurden (Côtes-du-Nord.) *Soc. Phyc. France*, Bull. 2: 3. 1956.
- BØRGENSEN, F. Some marine algae from Mauritius. Final part. Edited by Tyge Christensen. *Biol. Medd. K. Danske Vidensk. Selsk.* 23(4). 35 pp.
- BOUCK, G. B., and E. MORGAN. The occurrence of *Codium* in Long Island waters. *Bull. Torrey Bot. Club* 84(5): 384-387.
- BOURRELLY, P. *Cyanoptyche gloocystis* fo. *minor* nov. fo. Une algue rare de Rambouillet. *Rev. Alg. n.s.* 2(4): 275-276.
- . Un nouveau genre de Xanthophycée d'eau douce de la Forêt de Sénart: *Chadefaudiolithrix*. *Ibid.* 3(2): 97-102. (Heterotrichaceae)
- . Trois algues microscopiques marines des environs de Dinard. *Ibid.* 3(3): 168-169. (*Merismopedia laevis* f. *mediterranea*, *Holopedia sabulicola*, *Euglena obtusa*)
- . Une Euglène marine méconnue, *Euglena Roberti-Lamii* Lefèvre. *Bull. Soc. Bot. France* 104(1/2): 43-46.
- . Initiation pratique à la systématique des algues d'eau douce. VI. Tétraspores. *Bull. Mier. Appl. n.s.* 7(5): 118-124.
- . Algues d'eau douce du Soudan Français, région du Macina (A. O. F.). *Bull. Inst. Franç. Afr. Noire* 19A(4): 1047-1123. (*Spirogyra*, *Euastrum*, *Actinotaenium*, *Cosmarium*, *Arthrodesmus*, *Staurastrum*, *Spondylosium*, sp. nov.)
- . Note systématique sur quelques algues microscopiques des cuvettes

- supra-littorales de la région de Dinard. Bull. Lab. Marit. Dinard 43: 111-118.
- BOVÉE, E. C. Protozoa of Amazonian and Andean waters of Colombia, South America. J. Protozool. 4(1): 63-66.
- BOWEN, V. T. (Abstr.) The oceans and radioactive waste disposal. Bull. Ecol. Soc. Am. 38(1): 27.
- BOYDEN, A. Are there any "acellular animals?" Science 125(3239): 155-156.
- BRAARUD, T. Observations on *Peridinium trochoideum* (Stein) Lemm. in culture. Cell division and size variation: encystment. Nytt Mag. Bot. 6: 39-42.
- BRAARUD, T., J. MARKALI, AND E. NORDLI. A note on the thecal structure of *Exuviella baltica* Lohm. Nytt Mag. Bot. 6: 43-46.
- BRACHET, J. Remarques à propos des interactions biochimiques entre le noyau et le cytoplasme. Biokhimiya 22(1/2): 226-235. (*Acetabularia*)
- . Les interactions nucléocytoplasmiques dans la cellule au repos et pendant la mitose. Rev. Franç. Etud. Clin. Biol. 2(6): 551-554. (*Acetabularia*)
- BRACHET, J., AND H. CHANTRENNE. The function of the nucleus in the synthesis of cytoplasmic proteins. Cold Spring Harbor Symp. 21: 329-337. (incl. *Acetabularia*)
- BRACKETT, F. S., R. A. OLSON, AND R. G. CRICKARD. Transients in O<sub>2</sub> evolution by *Chlorella* in light and darkness. I. Phenomena and methods. In Gaffron, H., et al. (ed.), Research in photosynthesis, pp. 412-418.
- BRADLEY, D. E. A technique for the examination of a single specimen in both light and electron microscopes using carbon films. Mikroskopie 12(7/8): 257-263. (*Mallomonas*)
- . Some botanical applications of the carbon replica technique. In Sjöstrand, F. S., and J. Rhodin (ed.), Electron Microscopy, Proc. Stockholm Conf., pp. 274-275. (incl. *Mallomonas*, *Synura*)
- BRADLEY, D. F. Phosphate transients in photosynthesis. Arch. Biochem. & Biophys. 68(1): 172-185. (*Scenedesmus*)
- \*BRANDT, A. von. Algenverwertung an der bretonischen Küste. Fischwirtschaft 8(7): 168.
- BREIVIK, K. Observations on the macroscopic algal vegetation in the fjords near Stavanger, Norway. Nytt Mag. Bot. 6: 19-38.
- BREUER, J. P. An ecological survey of Baffin and Alazan bays, Texas. Publ. Inst. Mar. Sc. [Univ. Texas] 4(2): 134-155.
- BRODSKY, K. A., AND M. E. VINOGRADOV. [On the distribution of plankton in the Indian sector of the Antarctic region (according to data of the first trip of the Complex Antarctic Expedition of the Academy of Sciences of the USSR).] Dokl. Akad. Nauk SSSR 112(5): 957-960. (R)
- BRODY, S. S. (Abstr.) Fluorescence life times of photosynthetic pigments *in vivo* and *in vitro*. Diss. Abstr. 17(3): 484-485. (Univ. Illinois)
- BRODY, S. S., AND E. RABINOWITZ. Excitation lifetime of photosynthetic pigments *in vitro* and *in vivo*. Science 125(3247): 555. (*Chlorella*, *Porphyridium*, *Anacystis*)
- BRONGERSMA-SANDERS, M. Mass mortality in the sea. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 941-1010.
- BROOK, A. J. On some forms of *Micrasterias* new to or rare in Britain. Naturalist no. 861: 37-39.
- . Notes on desmids of the genus *Staurastrum*. I. *Staurastrum pseudopelagicum*, *S. subericiatum*, *S. avicula* and *S. denticulatum*. Ibid. 862: 97-100.
- . Notes on freshwater algae, mainly from lochs in Perthshire and Sutherland. Trans. & Proc. Bot. Soc. Edinburgh 37(2): 114-122. (*Crucigenia*, comb. nov.)
- BROOK, A. J., H. KUFFERATH, R. ROSS, AND P. A. SIMS. A bibliography of African freshwater algae. Rev. Alg. n.s. 2(4): 207-238.
- BROWN, F. A., H. M. WEBB, AND E. J. MACEY. Lag-lead correlations

- of barometric pressure and biological activity. Biol. Bull. 113(1): 112-119. (incl. *Fucus*)
- BRUCE, V. G., AND C. S. PITTENDRIGH. Endogenous rhythms in insects and microorganisms. Am. Nat. 91(858): 179-195. (review incl. algae)
- BRUCKER, W. Zur Bedeutung des Atmungs- und Assimilationsgaswechsels für die Phototaxis grüner Schwärmmzellen. Ber. Dtsch. Bot. Ges. 69 (Schlussheft): (24)-(25). (*Euglena*, *Lepocinclis*, *Chlamydomobryx*, *Chlamydomonas*)
- BRUGGER, J. E. Fluorescence yield of chlorophyll in *Chlorella* as a function of light intensity. In Gaffron, H., et al. (ed.), Research in photosynthesis, pp. 113-117.
- . Some observations on the chemiluminescence of algae. *Ibid.* 134-141. (*Chlorella*, *Scenedesmus*)
- BRUNEL, J. (Abstr.) Le *Stephanodiscus binderanus* est-il une introduction européenne ou bien un constituant normal du phytoplancton du Saint-Laurent? Ann. ACPAS 23: 94-95.
- . (Abstr.) Le catalogue des algues du Canada: son état actuel. *Ibid.* 95.
- BSHARAH, L. Plankton of the Florida Current. V. Environmental conditions, standing crop, seasonal and diurnal changes at a station forty miles east of Miami. Bull. Mar. Sc. Gulf & Carib. 7(3): 201-251.
- BUFFALO, N. D. (Abstr.) Studies of chromosome behavior in *Chlamydomonas*. Ass. Southeast. Biol. Bull. 4(1): 10.
- . (Abstr.) A comparative cytological study of four species of *Chlamydomonas*. Diss. Abstr. 17(8): 1649. (Vanderbilt Univ.)
- BULJAN, M. Report on the results obtained by a new method of fertilization experimented in the marine bay "Mljetska jezera." Acta Adriatic. 6(6). 44 pp. (SeE)
- BÜNNING, E. Endogenous diurnal cycles of activity in plants. Symp. Soc. Study Devel. & Growth 15: 111-126. (incl. *Oedogonium*)
- BÜNNING, E., AND M. TAZAWA. Über die negativ-phototaktische Reaktion von *Euglena*. Arch. Mikrobiol. 27(3): 306-310.
- BURKE, J. F. Diatoms. Proc. Staten Island Inst. Arts & Sc. 19(2): 56-59. (William T. Davis Wildlife Refuge)
- BURROWS, E. M., et al. List of marine algae collected in the district around Dale Fort, Pembrokeshire: September 19th.-26th. 1956. Phyc. Bull. 5: 21-31.
- BURROWS, E. M., K. M. DREW, AND M. T. MARTIN. The marine flora of the British Isles. Phyc. Bull. 5: 32-35. (sample format for projected flora)
- BURSCHE, E. M. Die Makrophytenvegetation thüringischer Teiche und ihre fischereiliche Bewertung. Z. Fisch. n.s. 5(3/4): 211-229. (incl. *Chara*)
- BURSCHE, E. M., H. KÜHL, AND H. MANN. Hydrochemie und Phytoplankton in der Unterelbe. Veröff. Inst. Meeresf. Bremerhaven 5(1): 165-192.
- BUTTERFASS, T. Über Graua, Karyoide und Pyrenoide von *Spirogyra*. Protoplasma 48(3): 368-381.
- . Über das Vorkommen umgekehrt gewundener Chromatophoren bei *Spirogyra*. *Ibid.* 419-421.
- CACHON, J. Sur quelques techniques de pêches planctoniques pour études biologiques. Bull. Inst. Océanogr. [Monaco] 54(1103). 6 pp.
- CALDER, M. G. Kathleen M. Drew. Phytomorphology 7(3/4): 407-408.
- . Dr. Kathleen M. Drew. Nature 180(4592): 889-890.
- CARAM, B. Sur la sexualité et le développement d'une Phéophycée: *Cylindrocarpus berkeleyi* (Grev.) Cronan. C. R. Acad. Sc. 245(4): 440-443.
- CARMON, J. [Treasures of our seashore.] Tel-Aviv, Israel: Yavneh. 368 pp. (H) (algae, pp. 66-140)
- CARPELAN, L. H. Hydrobiology of the Alviso salt ponds. Ecology 38(3): 375-390.
- \*CARVALHOS RIOS, E. de. [Chemical composition of the algae used as fertilizers in Rio Grande.] An. Ass. Bras. Quím. 12: 181-187. (Pg) (*Enteromorpha*, *Ulva*)
- CASPER, H. Black Sea and Sea of Azov. In Hodgketh, J. W. (ed.),

- Traité on marine ecology and paleoecology, Vol. 1, pp. 801-889.
- CAVALIERE, A. Algologia dello stretto di Messina. Nota preliminare. Boll. Pesca, Piscicoltura, e Idrobiologia. n.s. 11(2): 281-282.
- CAYLE, T. (Abstr.) Effect of wave-length on the distribution of  $C^{14}$  in the early products of photosynthesis. Diss. Abstr. 17(3): 486. (Univ. Illinois)
- CAYLE, T., AND R. EMERSON. Effect of wave-length on the distribution of carbon-14 in the early products of photosynthesis. Nature 179(4550): 89-90. (*Chlorella pyrenoidosa*)
- CHADEFAUD, M. (Abstr.) Sur les *Labyrinthula*. Soc. Phyc. France, Bull. 2: 7-8. 1956. (*Labyrinthorhiza*, gen. nov.; relation to Chrysophyceae)
- . Les champignons et les algues. Ann. Univ. Paris 27(1): 5-22. (major groups; phylogeny)
- . Sur l'*Enteromorpha chadefaudii* J. Feldmann. Rev. Gén. Bot. 64(766): 653-669. (*Feldmannodora*, gen. nov.)
- CHALLENGER, F., R. BYWOOD, P. THOMAS, AND B. J. HAYWARD. Studies on biological methylation. XVII. The natural occurrence and chemical reactions of some thetins. Arch. Biochem. & Biophys. 69: 514-523. (esp. *Enterophora*)
- CHALUPA, J., AND M. STEPANEK. A contribution to the study of vertical migration of zooplankton and environmental characteristics in Reservoir Sedlice. Sbornik VSCHT, odd. FTPV 1: 249-337. (CzE) (incl. phytoplankton)
- CHANCE, B., AND R. SAGER. Oxygen and light induced oxidations of cytochrome, flavoprotein, and pyridine nucleotide in a *Chlamydomonas* mutant. Pl. Physiol. 32(6): 548-561.
- CHANCE, B., AND B. STREHLER. Effects of oxygen upon light absorption by green algae. Nature 180(4589): 749-750. (*Chlorella*, *Chlamydomonas*)
- . Effects of oxygen and red light upon the absorption of visible light in green plants. Pl. Physiol. 32(6): 536-548. (*Chlorella*, *Chlamydomonas*)
- CHAPMAN, V. J. Marine algal ecology. Bot. Rev. 23(5): 320-350.
- . (Abstr.) The marine biogeographical provinces of the South Pacific. Abstr. 9th Pac. Sc. Congr., pp. 55-56.
- CHAPMAN, V. J., R. H. THOMPSON, AND E. C. M. SEGAR. Check list of the fresh-water algae of New Zealand. Trans. Roy. Soc. N. Z. 84(4): 695-747.
- CHARDARD, R., AND C. ROUILLER. L'ultrastructure de trois algues des-midiées. Etude au microscope électronique. Rev. Cyt. Biol. Vég. 18(2): 153-178. (*Micrasterias*, *Cosmarium*, *Closterium*)
- CHEMIN, E. Sur la flore algale de Ouessant. Bull. Lab. Marit. Dinard 43: 129-130.
- CHIBA, T., T. SATOW, A. TSURUTA, O. HIRANO, AND S. TAGAWA. Oceanographical and planktological studies of the tuna-fishing grounds in the middle part of the North Indian Ocean. J. Shimonoseki Coll. Fish. 6(3): 291-313. (JE)
- CHIHARA, M. Studies on the life-history of the green algae in the warm seas around Japan (5). On the life-history of *Pseudodelva* sp. J. Jap. Bot. 32(4): 101-109 (JE)
- . [On the newly-built Izu Branch of the Shizuoka Fishery Experiment Station.] Bull. Jap. Soc. Phyc. 5(2): 63-64. (J)
- CHOLNOKY, B. J. Beiträge zur Kenntnis der südafrikanischen Diatomeenflora. Port. Acta Biol. 6B(1): 53-93. (*Caloneis*, *Eunotia*, *Gyrosigma*, *Navicula*, *Nitzschia*, sp. nov.)
- . Neue und seltene Diatomeen aus Afrika. III. Diatomeen aus dem Tugela-Flusssystem, hauptsächlich aus den Drakensbergen in Natal. österr. Bot. Z. 104(1/2): 25-99. (*Achnanthes*, *Cymbella*, *Diptoneis*, *Gomphonema*, *Navicula*, *Nitzschia*, *Pinnularia*, *Stauroneis*, *Surirella*, sp. nov.)
- . Über die Diatomeenflora einiger Gewässer in den Magalies-Bergen nahe Rustenburg (Transvaal). Bot. Not. 110(3): 325-362. (*Achnanthes*, *Cymbella*, *Frustulia*, *Navicula*, *Pinnularia*, sp. nov.)

- CHRISTENSEN, T. *Chaetomorpha linum* in the attached state. Bot. Tidsskr. 53(3): 311-316.
- . Some Irish algal finds. Phyc. Bull. 5: 42-43.
- . Three species of *Vaucheria* new to Britain. *Ibid.* 5: 43.
- CHIUNG, Y. H., AND Y. K. CHANG. A study of *Euglena* in the area of Seoul. Univ. Seoul. 5: 119-128.
- CIFERRI, R. Type nomenclature of micro-organisms in culture. Taxon 6(5): 154.
- CIRILLO, V. P. Long-term adaptation to fatty acids by the phytoflagellate, *Polytoma uvella*. J. Protozool. 4(1): 60-62.
- CLAES, H. Das Auftreten von Zwischenprodukten der Carotinoidsynthese bei röntgeninduzierten Mutanten und der Nachweis eines Lichtfaktors bei der Carotinoidsynthese von *Chlorella vulgaris*. C. R. 8me Congr. Int. Bot. 11/12: 78-79.
- . Biosynthese von Carotinoiden bei *Chlorella*. III. Untersuchungen über die lichtabhängige Synthese von  $\alpha$ - und  $\beta$ -Carotin und Xanthophyllen bei der *Chlorella*-Mutante 5/520. Z. Naturf. 12b(6): 401-407.
- CLENDENNING, K. A. Recent investigations of photosynthesis and the Hill reaction. C. R. 8me Congr. Int. Bot. 11/12: 21-32.
- . Biochemistry of chloroplasts in relation to the Hill reaction. Ann. Rev. Pl. Physiol. 8: 137-152.
- CLINGMAN, A. L., J. R. NUNN, and A. M. STEPHEN. Red-seaweed polysaccharides. 1. *Gracilaria confervoides*. J. Chem. Soc. 1957: 197-203.
- COE, W. R. Fluctuations in littoral populations. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 935-939.
- COLL, G. A. Studies on a Kentucky Knobs Lake. III. Some qualitative aspects of the net plankton. Trans. Ky. Acad. Sc. 18(4): 88-101.
- COLL, K. (Abstr.) Aceto-carmin stain in the cytogenetical investigation of some marine algae of the Pacific coast. Abstr. 9th Pac. Sc. Congr., p. 73.
- COLEMAN, J. W., A. S. HOLT, AND E. I. RABINOWITCH. Reversible bleaching of chlorophyll *in vivo*. In Gaffron, H., et al. (ed.), Research in photosynthesis, pp. 68-74. (*Chlorella*)
- COLLANDER, R. Permeability of plant cells. Ann. Rev. Pl. Physiol. 8: 335-348. (incl. algae)
- COLLINS, V. G. Planktonic bacteria. J. Gen. Microbiol. 16(1): 268-272. (incl. relationships with algae)
- CONRAD-MARIE, Frère. (Abstr.) Contribution à la flore desmidiale d'Ilaïti. Ann. ACFAS 23: 94.
- COOK, J. G. Seaweed as a source of chemicals. Discovery 18(11): 477-479.
- COOKE, W. B. (Abstr.) The structure of the biological film on the surface stone of trickling filters. Bull. Ecol. Soc. Am. 38(3): 65.
- COOPER, I. C. G. Microscopic life. I. Algae. Proc. Staten Island Inst. Arts & Sc. 19(2): 60-62. II. Protozoa. *Ibid.* 20(1): 3-4. (William T. Davis Wildlife Refuge)
- CORBETT, J. J. Volume expansion of *Euglena gracilis* in fresh culture media. J. Protozool. 4(2): 71-74.
- CORILLION, R. Les Charophycées de France et d'Europe occidentale. Bull. Soc. Sc. Bretagne 32(1): 5-259; 32(2): 260-499.
- CORLISS, J. O. Concerning the "cellularity" or acellularity of the protozoa. Science 125(3255): 988-989. (comments by S. H. Hutner & L. Provasoli, p. 989; G. W. Martin, p. 990; A. Boyden, p. 990).
- CROASDALE, H. T. Freshwater algae of Alaska. I. Some desmids from the interior. 3. Cosmariae concluded. Trans. Am. Mier. Soc. 76(2): 116-158. (*Staurodesmus*, sp. nov.)
- CUSHING, D. H. Production of carbon in the sea. Nature 179(4565): 876.
- DAMASCHKE, K. Verfolgung der Bildung reduzierender Substanzen mit Hilfe der elektrochemischen  $H_2O_2$ -Massmethode an inkubierter *Chlorella pyrenoidosa* im Hellen und im Dunkeln. Z. Naturf. 12b(3): 150-155.
- . Die Wasserstoffgärung von *Chlo-*

- rella* im Dunkeln nach Anaerobiose unter Stickstoff. *Ibid.* 12b(7): 441-443.
- DANFORTH, W. F., AND B. W. WILSON. Adaptive changes in the acetate metabolism of *Euglena*. *J. Protozool.* 4(1): 52-55.
- DANGEARD, P. L'iode des algues, les ioduques, l'iodovolatilisation. *Botaniste* 41(1-6): 187-207.
- . Observations sur quelques *Codium* de Guéthary. *Soc. Phyc. France, Bull.* 3: 4-6.
- . Travaux récents sur les constituants figurés du cytoplasme végétal. *Bull. Soc. Bot. France* 103(7/8): 509-520.
- . Sur deux espèces nouvelles d'Ulvaécées de la côte du Maroc. *C. R. Acad. Sc.* 244(12): 1589-1592. (*Enteromorpha flabellata*, *Ulva linearis*)
- . Faculté de régénération et multiplication végétative chez les Entéromorphes. *Ibid.* 244(20): 2454-2457.
- DAO, S. Contribution à l'étude de la flore marine des Baléares. *Vie et Milieu, suppl.* 6: 165-176.
- . La gamétogénèse chez l'*Acetabularia mediterranea* Lamouroux, Dasycladacée. *C. R. Acad. Sc.* 245(15): 1263-1265.
- DAS, S. M., AND V. K. SRIVASTAVA. Quantitative studies on freshwater plankton of a fish-lake in India. *Zool. Zhurn.* 36(3): 328-336. (RE)
- DAVIS, J. J., AND R. F. FOSTER. (Abstr.) Bioaccumulation of radioisotopes through aquatic food chains. *Bull. Ecol. Soc. Am.* 38(1): 26.
- DAVY DE VIRVILLE, A. (Abstr.) Sur quelques problèmes posés par la photographie en couleur des algues marines. *Soc. Phyc. France, Bull.* 2: 8. 1956.
- . Croisière phycologique en Yougoslavie. *Rev. Gén. Bot.* 64(762/763): 483-484. (report of phycological conference at Split, July 1957)
- DAWSON, E. Y. Notes on eastern Pacific insular marine algae. *Los Angeles County Mus., Contrib. Sc.* no. 8. 8 pp.
- . Marine algae from the Pacific Costa Rican gulfs. *Ibid.* 15. 28 pp. (*Pterocladia*, *Gelidiella*, sp. nov.)
- . An annotated list of marine algae from Eniwetok Atoll, Marshall Islands. *Pac. Sc.* 11(1): 92-132. (*Antithamnion*, *Callithamnion*, *Ceramium*, sp. nov.)
- DE, P. K., AND L. N. MANDAI. Fixation of nitrogen by algae in rice soils. *Soil Sc.* 81(5): 453-458. 1956.
- DEACON, G. E. R. Marine science in the south-east Pacific Ocean. *Nature* 179(4550): 66-68.
- DE ANGELIS, C. M. Cielo annuale del fitoplancton del golfo di Napoli. *Boll. Pesca, Piscicult. e Idrobiol.* n.s. 11(1): 37-55. 1956.
- . Ricerche fisico-chimiche e biologiche sui laghi Salmastri Pontini in relazione alla produttività. I. Il lago di Fogliano. Osservazioni sul ciclo stagionale del plancton. *Ibid.* 11(2): 225-234. 1956.
- DE JAGER, B. V. D. Variations in the phytoplankton of the St. Helena Bay area during 1954. *Union S. Afr., Dept. Comm. & Ind., Div. Fish., Invest. Rep.* no. 25. 78 pp.
- DEKEN-GRENSON, M. de. Selective modification of the differential growth rate of the chloroplasts in *Euglena* as induced by several factors. *Biochem. J.* 66(2): 26p.
- DELAAY, C. Action de la coelicine sur la croissance et la différenciation de l'appareil végétatif de *Chara vulgaris* L. *C. R. Acad. Sc.* 244(4): 485-487.
- DEMALSY, P. Rosecoff et Banyuls-sur-Mer. Coup d'oeil sur leur station biologique et leur flore. *Nat. Belges* 38(5): 108-120.
- . Note préliminaire sur quelques diatomées épiphytes des environs de Yangambi (Congo belge). *Bull. Jard. Bot. Etat [Bruxelles]* 27(4): 679-683.
- DENIZOT, M. Sur la répartition géographique du *Peyssonnelia coriacea* J. Feldmann. *Rev. Alg. n.s.* 2(4): 274-275.
- DESIKACHARY, T. V. Electron microscope studies on diatoms. *J. Roy. Microsc. Soc.* 76(1/2): 9-36. (review)
- . Electron microscopy and algology. *Proc. Indian Acad. Sc.* 46B(1): 54-64. (review)
- . On a "Diagoropsis" from Andamans. *Rev. Alg. n.s.* 3(2): 51-56.

- DESIKACHARY, T. V., AND M. S. BALAKRISHNAN. *Taenioma* J. Ag. from India. Proc. Indian Acad. Sc. 46B(5): 336-345.
- DE VALERA, M. A note on the distribution of *Asparagopsis armata* and *Falkenbergia rufolanosa* in Ireland as compared with Spain. Coll. Bot. 5(2): 377-380.
- . Notes on intertidal ecology in Ireland. Irish Nat. J. 12(7): 182-187.
- DICKINSON, C. I. Dr. F. Börgesen 1866-1956. Kew Bull. 1956(3): 400.
- DOBRIZHANSKAYA, M. A. [Seasonal peculiarities in the vertical distribution of oxygen within the zone of photosynthesis in the Black Sea.] Dokl. Akad. Nauk SSSR 115(4): 755-758. (R)
- DOIGNON, P. Histoire et bibliographie des recherches algologiques dans le massif de Fontainebleau. Rev. Alg. n.s. 3(2): 103-105.
- DOTY, M. S. Rocky intertidal surfaces. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 535-585.
- . Annotated bibliography. Marine algae. *Ibid.* 1041-1050.
- DOTY, M. S., AND M. OGURI. Evidence for a photosynthetic daily periodicity. Limnol. & Oceanogr. 2(1): 37-40.
- DOUGHERTY, E. C. (Abstr.) Neologisms needed for structures of primitive organisms. 1. Types of nuclei. 2. Vibratile organelles. J. Protozool. 4(suppl.): 14.
- . (Abstr.) A revised classification for the higher taxa of the Monera. *Ibid.*
- DOUGHERTY, E. C., H. T. GORDON, AND M. B. ALLEN. The absence of  $\alpha$ -diaminopimelic acid from the primitive red alga *Porphyridium cruentum*. Exper. Cell Res. 13(1): 171-173.
- DOUGHTY, C. C. Fractionation of cell-free preparations from *Chlorella pyrenoidosa* showing photochemical oxygen production. Arch. Biochem. & Biophys. 72(2): 512-514.
- DREW, K. M. The red algae (1906-56 and after). Nature 180(4577): 112-115. (Review of H. Kylin, Die Gattungen der Rhodophyceen, 1956)
- DREW, K. M., AND I. FRIEDMANN. Occurrence of motile gametes in *Prasiola stipitata* Suhr. Nature 180(4585): 557-558.
- DREWS, G. Zur Cytologie der Blaualgen. Mikrokosmos 46(10): 230-231.
- . Die phototaktischen Reaktionen einiger Cyanophyceen. Ber. Dtsch. Bot. Ges. 70(7): 259-262. (*Anabaena*, *Cylindrospermum*)
- DREWS, G., AND W. NIKLOWITZ. Beiträge zur Cytologie der Blaualgen. III. Untersuchungen über die granulären Einschlüsse der Hormogonales. Arch. Mikrobiol. 25(4): 333-351. (*Anabaena*, *Cylindrospermum*, *Phormidium*, *Oscillatoria*)
- DROOP, M. R. (Abstr.) Studies on the phytoflagellate *Haematococcus pluvialis* Flotow. Abstr. Diss. Univ. Cambridge 1954/55: 15-16.
- . Auxotrophy and organic compounds in the nutrition of marine phytoplankton. J. Gen. Microbiol. 16(1): 286-293.
- . Vitamin B<sub>12</sub> in marine ecology. Nature 180(4594): 1041-1043. (incl. *Monochrysis lutheri*; comment by K. W. Daisley)
- DROUET, F. The Maehris Brazilian Expedition. Botany: Cyanophyta. Los Angeles County Mus., Contrib. Ser. no. 5. 2 pp.
- . Type specimens of algae in the Herbarium of Anton Hansgirg. Ann. Naturhist. Mus. Wien 61: 41-59.
- DROUET, F., AND W. A. DAILY. Revision of the coccoid Myxophyceae: additions and corrections. Trans. Am. Micr. Soc. 76(2): 219-222.
- DUYSENS, L. N. M. Methods for measurement and analysis of changes in light absorption occurring upon illumination of photosynthesizing organisms. In Gaffron, H., et al. (ed.), Research in photosynthesis, pp. 59-67. (*Chlorella*)
- DUYSENS, L. N. M., AND J. AMESZ. Fluorescence spectrophotometry of reduced phosphopyridine nucleotide in intact cells in the near-ultraviolet and visible region. Biochim. et Biophys. Acta 24(1): 19-26. (*Chlorella*)

- DUYSENS, L. N. M., AND G. SWEEP. Fluorescence spectrophotometry of pyridine nucleotide in photosynthesizing cells. *Biochim. et Biophys. Acta* 25(1): 13-16. (incl. *Anacystis, Chlorella*)
- DVORAKOVA-HILADKA, J., AND M. BASLEROVA. The substitution of a decoction of yeast for Witte's peptone in the cultivation of *Chlorella vulgaris*, *C. protothecoides*, and *C. xanthella*. *Cesk. Biol.* 6(3): 232-237. (CzRE)
- EADIE, J. M. The mid-winter rumen microflora of the seaweed-eating sheep of North Ronaldshay. *Proc. Roy. Soc. Edinburgh* 66B(3): 276-287.
- EBERSOLD, W. T., AND R. P. LEVINE. (Abstr.) Multiple strand crossing over in *Chlamydomonas reinhardtii*. *Genetics* 42(4): 367.
- EDMONDSON, W. T. Trophic relations of the zooplankton. *Trans. Am. Micr. Soc.* 76(3): 225-245. (phytoplankton as food)
- EKMAN, S. Die Gewässer des Abisko-Gebietes und ihre Bedingungen. *K. Svenska Vetensk. Akad. Handl.*, ser. 4, 6(6). 172 pp.
- ELBERS, P. F., K. MINNAERT, AND J. B. THOMAS. Submicroscopic structure of some chloroplasts. *Acta Bot. Neerl.* 6(3): 345-350. (incl. *Synechococcus, Nitzschia*)
- EMERSON, R. (Abstr.) Dependence of yield of photosynthesis in long-wave red on wavelength and intensity of supplementary light. *Science* 125 (3251): 746. (*Chlorella*)
- EMERSON, R., AND R. V. CHALMERS. The maximum efficiency of photosynthesis and transient changes in metabolism. *C. R. 8me Congr. Int. Bot.* 11/12: 1-11.
- . On the efficiency of photosynthesis above and below compensation of respiration. In Gaffron, H., et al., (ed.), *Research in photosynthesis*, pp. 349-352. (*Chlorella*)
- . Transient changes in cellular gas exchange. *Ibid.* 406-408. (*Chlorella, Scenedesmus*)
- EMERSON, R., R. V. CHALMERS, AND C. CEDERSTRAND. Some factors influencing the long-wave limit of photosynthesis. *Proc. Natl. Acad. Sc.* 43(1): 133-143. (*Chlorella, Porphyridium*)
- EMERY, K. O., AND R. E. STEVENSON. Estuaries and lagoons. I. Physical and chemical characteristics. In Hedgpeth, J. W. (ed.), *Treatise on marine ecology and paleoecology*, Vol. 1, pp. 673-693. III. Sedimentation in estuaries, tidal flats and marshes. *Ibid.* 729-749.
- ENGBERT, H. R. Caedax 547—ein neues Diatomeeneinschlussmittel. *Mikroskopos* 46(5): 119-120.
- ENOMOTO, Y. Studies on plankton in the west coast of Kyushu. 1. On the seasonal successions of phytoplankton and zooplankton chiefly in 1954. *Bull. Seikai Reg. Fish. Res. Lab.* 11: 1-9.
- EPPLEY, R. W. Cation binding and exchange in killed red algal tissues. *Exper. Cell Res.* 13(1): 173-174. (*Porphyra*)
- . (Abstr.) Sodium and potassium regulation by a marine red alga, *Porphyra perforata*. *Diss. Abstr.* 17 (11): 2393-2394. (Stanford Univ.)
- EPPLEY, R. W., AND J. R. BLINKS. Cell space and apparent free space in the red alga, *Porphyra perforata*. *Pl. Physiol.* 32(1): 63-64.
- ERCEGOVIC, A. Principes et essai d'un classement des étages benthiques. *Rec. Trav. Stat. Mar. Endoume* 22: 17-21.
- . La flore sous-marine de l'îlot de Jabuka. *Acta Adriat.* 8(8). 130 pp. (*Acrochaetium, Pseudochlorodesmis, Pseudodictyon, Endoderma* [?], *Calothrix, Lyngbya, Radaisia*, sp. nov.)
- ERNST, J., AND J. FELDMANN. Une nouvelle Delessariacée des côtes de Bretagne: *Drachiella spectabilis* nov. gen. nov. spec. *Rev. Gén. Bot.* 64 (762/763): 466-478.
- ERNST-SCHWARZENBACH, M. Zur Kenntnis der Fortpflanzungsmodi der Braunalge *Halopteris flicina* (Gratel.) Kütz. *Pubbl. Staz. Zool. Napoli* 29: 347-388.
- ERRERA, M., AND F. VANDER-HAEGHE. Effets des rayons u.v. sur *Acetabularia mediterranea*. *Exper. Cell Res.* 13(1): 1-10.

- ERTL, M. Jahreszeitliche Veränderungen der Brunnenuorganismen im Verhältnis zur oberflächlichen Verunreinigung der Brunnen. Univ. Carol., Biol. 3(2): 109-131. (CzG)
- ERTL, M., AND S. JURIS. Plankton der astatischen Gewässer aus dem Gebiet der Orava-Talsperre. Biológia [Bratislava] 12(5): 352-361. (CzRG)
- ESPING, U. A factor inhibiting fertilization of sea urchin eggs from extracts of the alga *Fucus vesiculosus*. I. The preparation of the factor inhibiting fertilization. Ark. Kemi 11(2): 107-115. II. The effect of the factor inhibiting fertilization on some enzymes. *Ibid.* 117-127.
- ETTL, H. Einige wenig bekannte und neue Heterokonten. Arch. Protistenk. 102(2): 219-228. (*Glocobotrys*, *Asterogloea*, *Tribonema*, sp. nov.)
- ETTL, H., P. JAVORNICKY, AND J. PERMAN. Die Algenflora der Moore und Kleingewässer in der Umgebung von Horská Kvilda (Inneregfeld) im Böhmerwald. Ochrana Přír. 12(6): 161-167. (CzRG)
- EVANS, R. G. The intertidal ecology of some localities on the Atlantic coast of France. J. Ecol. 45(1): 245-271.
- FAURE-FREMIET, E., AND C. ROULLER. Le flagelle interne d'une chryomonadale: *Chromulina psammobia*. C. R. Acad. Sc. 244(21): 2655-2657.
- FELDMANN, G. Un nouvel ascomycète parasite d'une algue marine: *Chadefaudia marina*. Rev. Gén. Bot. 64(758): 140-152. (on *Rhodymenia palmata*)
- FELDMANN, J. Sur l'hermaphroditisme du *Bryopsis hypnoides* Lamouroux. Soc. Phyc. France, Bull. 3: 7-8.
- . Une nouvelle Cyanophycée endophyte (*Mycophyella Dilscæ*, nov. sp.). Bull. Soc. Bot. France 103 (9/10): 573-576.
- . F. Börgesen (1866-1956). Notice biographique. Rev. Alg. n.s. 3 (1): 2-15.
- . La reproduction des algues marines dans les rapports avec leur situation géographique. Année Biol., ser. 3, 33(1/2): 49-56.
- . Les recherches sur la flore marine méditerranéenne de 1938 à 1954. Comm. Int. Expl. Sc. Médit., Rapp. & Proc. 13: 145-161. 1956.
- FINK, H., AND E. HEROLD. Über die Eiweissqualität einzelliger Grünalgen und ihre Lebernekrose verhütende Wirkung. I. Hoppe-Seyler's Z. Physiol. Chem. 305(4-6): 182-191. II. *Ibid.* 307(2-6): 202-216. (*Scenedesmus obliquus*)
- FISCHER-PIETTE, E. Sur des déplacements de frontières biogéographiques observés au long des côtes ibériques dans le domaine intercotidal. Publ. Inst. Biol. Apl. 26: 35-40.
- . Sur les progrès des espèces septentrionales dans le bios intercotidal ibérique: situation en 1956-1957. C. R. Acad. Sc. 245(3): 373-375.
- FISH, G. R. A seiche movement and its effect on the hydrology of Lake Victoria. Gt. Brit. Colon. Office, Fish. Publ. no. 10. 68 pp. (phytoplankton, pp. 50-63)
- FISHER, I. S., AND E. PERCIVAL. The water-soluble polysaccharides of *Cladophora rupestris*. J. Chem. Soc. 1957: 2666-2675.
- FJERDINGSTAD, E. Microphyte communities in outlets from ground water wells rich in CH<sub>4</sub>. Arch. Hydrobiol. 53(2): 240-249.
- . A lime-incrusting algal community of a Danish well. Rev. Alg. n.s. 2(4): 246-248.
- . Some samples of algae from Strömö and Vaugö (the Faeroes). *Ibid.* 3(2): 63-67.
- FLEMING, R. H. General features of the oceans. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 87-108.
- FLINT, L. H. Notes on algae of Quebec. I. Mont Tremblant Provincial Park. Nat. Can. 84(6/7): 157-160. II. Laurentide Park. *Ibid.* 84(8/9): 179-181.
- FLORIN, M. B. Plankton of fresh and brackish waters in the Sodertälje Area. Acta Phytogeogr. Succ. 37. 144 pp. (*Staurodasmus*, sp. nov.)
- . Insjöstudier i Mellansverige. Mikrovegetation och pollenregni i vikar av Östersjöbäcken och ins-

- jöar från preboreal tid till nutid. Acta Phytogeogr. Succ. 38. 29 pp. (incl. diatoms)
- FLOREN, R. Veit Brocher Wittrock, 5/5 1839-1/9 1914, och hans livsgränning. Svensk Bot. Tidskr. 51 (1): 363-377.
- FOCKE, R. *Atraktochrysis rotans* nov. gen., nov. spec., eine neue koloniebildende Ochromonadale. Rev. Alg. n.s. 2(4): 239-245.
- FOGED, N. The diatom flora of some Danish springs. Part I. Strandkær, the Mols-laboratory. Nat. Jutland. 6/7: 1-84. (*Navicula*, *Nitzschia*, sp. nov.)
- FOGG, G. E. Relationships between metabolism and growth in plankton algae. J. Gen. Microbiol. 16(1): 294-297.
- . The training of microbiologists. Algae and the teaching of microbiology. Chem. & Ind. 1957(39): 1280.
- FOJLMANN, G. Über Kappenplasmolyse und Vacuolenkontraktion. II. Die Reizplasmolyse mariner Planktondiatomeen. Planta 48(4): 393-417.
- . Die Permeabilitäts-Eigenschaften der Protoplasten von *Bryopsis muscosa* Lamour. und *Bryopsis plumosa* (Huds.) Agardh während des Reizplasmolyse-Abbaus. Z. Naturf. 12b(10): 663-665.
- . Die Anelektrolytaufnahme der Auxosporen zentrischer Diatomeen. Naturwissenschaften 44(21): 567-568.
- . Die Protoplastenkontraktionen der Pflanzenzelle. Plasmolyseform und Plasmolysevorgang. Mikrokosmos 47(3): 52-61. (incl. *Spirogyra*, *Mclosira*)
- FOREST, H. S. The remarkable *Draparnaldia* species of Lake Baikal, Siberia. Castanea 22(4): 126-134.
- FORREST, H. S., C. VAN BAALLEN, AND J. MYERS. Occurrence of pteridines in a blue-green alga. Science 125(3250): 699-700. (*Anacystis nidulans*)
- FÖRSTER, H. Das Wirkungsspektrum der Kopulation von *Chlamydomonas eugametos*. Z. Naturf. 12b(12): 765-770.
- FOSBERG, F. R. Some geological processes at work on coral atolls. Trans. N.Y. Acad. Sc. n.s. 19(5): 411-422.
- . The Maldiv Islands, Indian Ocean. Atoll Res. Bull. no. 58. 37 pp. (incl. *Nostoc*, *Halimeda*)
- FOTT, B. *Aphelidium chlorococcarum* species nova, ein neuer Parasit in Grünalgen. Univ. Carol., Biol. 3(2): 229-237. (CzRG)
- . Taxonomie der mikroskopischen Flora einheimischer Gewässer. Preslia 29: 278-319. (CzRG) (*Gloeoskene* gen. nov. Gloeobotrydaceae; *Telmatoskene* & *Ankyra*, gen. nov. Chlorococcales; *Tetraplektron*, *Katodinium* & *Rhopalosolen*, nom. nov.; *Lagynion*, *Chrysopyxis*, *Mallomonas*, *Stylopyxis*, *Arachnochloris*, *Goniochloris*, *Gymnodinium*, *Katodinium*, *Pyramimonas*, *Chlamydomonas*, *Gloeomonas*, *Dysmorphococcus*, *Carteria*, *Hydriarium*, *Lambertia*, sp. nov.)
- FOTT, B., AND J. LUDVIK. Die submikroskopische Struktur der Kiesel-schuppen bei *Synura* und ihre Bedeutung für die Taxonomie der Gattung. Preslia 29(1): 5-16.
- FOX, D. L. Particulate organic detritus. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 383-389.
- FOX, M. A first list of marine algae from Nigeria. J. Linn. Soc. Bot. 50(362): 615-631.
- FRASER, J. H. Scottish plankton investigations in 1955. Annal. Biol. 12: 44: 82-84.
- FREDRICK, J. F. Effect of surface activity and chelation phenomena on the activity of the polyglucoside-synthesizing enzymes of *Oscillatoria*. Physiol. Pl. 10(5): 844-857.
- FRENCH, C. S., AND H. S. HUANG. The shape of the red absorption band of chlorophyll in live cells. Carnegie Inst. Wash. Year Book 56: 266-268. (*Chlorella*, *Porphyridium*, *Anacystis*)
- FRENCH, C. S., J. H. C. SMITH, AND H. I. VIRGIN. Fluorescence spectra of protochlorophyll, chlorophylls c and d, and the pheophytins. In Gaffron, H., et al. (ed.), Research in photosynthesis, pp. 17-18.
- FRIDVALSZKY, L. Die mikroskopische und submikroskopische Struktur der

- Zellwand von *Tolypellopsis stelligera* Mig. Acta Biol. Acad. Sc. Hung. 8(1): 73-80.
- FRIDVALSZKY, L., B. LOVAS, AND M. BARLA. (Abstr.) The latest achievements of electron microscopy in plant cytology and histology. Acta Biol. Acad. Sc. Hung., suppl. 1: 47. (Chara)
- FRIEDMANN, I. Beiträge zu Morphologie und Formwechsel der atrophischen Bangioidee *Phragmonema sordidum* Zopf. Österr. Bot. Z. 103(5): 613-633.
- FROLANDER, H. F. A plankton volume indicator. J. Conseil 22(3): 278-283.
- FÜCHTBAUER, W. Trockenresistenzsteigerung nach osmotischer Adaptation bei *Saccharomyces* und *Chlorella*. Arch. Mikrobiol. 26(3): 209-230.
- . Über den Zusammenhang der Trockenresistenz einiger Einzeller mit ihrem Retentionswasser und Mineralstoffgehalt. *Ibid.* 231-253. (*Saccharomyces*, *Rhodotorula*, *Chlorella*)
- FUJITA, H., A. KISHIMOTO, AND K. NINOMIYA. Some polyelectrolyte properties of sodium alginate. Mem. Coll. Agr. Kyoto Univ. 76: 9-27.
- FUJIWARA, T. Studies on chromoproteins in Japanese nori (*Porphyra tenera*). III. Chromopeptides derived from phycoerythrin by peptic digestion. J. Biochem. 44(11): 723-733.
- \*FUJIYAMA, T. [Cyto-chemical study on the crown-gall of *Porphyra tenera*.] In Univ. Tokyo, Amemiya Jub. Publ. Fish. Sc., pp. 829-840. (J)
- \*———. [Studies on the algae growing on the salt-field.] Bull. Soc. Salt Sc. Japan 10(4): 156-159. (J)
- \*FUJIYAMA, T., AND M. KABUTO. Studies on the ecology and weeding of the algae growing on the sloping salt-field. I. Species, their ecology and fundamental researches on weeding of the algae. Plant Protection 10(3): 105-116. (JE)
- FUKAI, R., AND F. SHIOKAWA. Studies on the growth of laver (*Porphyra* spp.) with reference to chemical environment. I. On the analytical method for inorganic components of laver as indices for the varying environment. Bull. Tokai Reg. Fish. Res. Lab. 18: 21-30. (JE)
- FUKAI, R., S. KOJIMA, AND T. MARUYAMA. On the variations of nutrient salts in the water of the lavenursery located along the coast of Nagai, Kanagawa Prefecture. Bull. Tokai Reg. Fish. Res. Lab. 18: 37-46. (JE)
- \*FUKUHARA, E. [Notes on *Conchocelis*-phase of *Porphyra* from the coast of Hokkaido.] Monthly Rep. Hokkaido Fish. Exper. Stat. 14(12): 17-22. (J)
- . Ecological studies on *Iridophycus cornucopiae* (P. et R.) Setch. et Gardn. 6. On the shedding of the spores (I). Bull. Hokkaido Reg. Fish. Res. Lab. 16: 70-73. (JE)
- FUKUSHIMA, H. [A list of Japanese freshwater algae, including the marine species of blue-green algae and fossil diatoms. 4.] J. Yokohama Municipal Univ., ser. C-18 (71). 24 pp. [5.] *Ibid.* C-20(82). 54 pp. (J)
- FUNK, G. Fruktifikationszeiten der Meeresalgen bei Neapel. Pubbl. Staz. Zool. Napoli 29: 126-138.
- GAARDER, K. R., AND J. MARKALI. On the cocolithophorid *Crystallolithus hyalinus* n. gen., n. sp. Nytt Mag. Bot. 5: 1-6.
- GAEVSKAYA, N. S. Nutrition and food interrelations of animals inhabiting bottom vegetation and wracks of the Black Sea. II. Nutrition of the gastropod mollusc *Cerithium reticulatum* (Da Costa). Biull. Moskov. Obsheh. Isp. Prir., Otd. Biol. 61(5): 31-45. (RE) (diatoms as food)
- GAFFRON, H. Photosynthesis and the origin of life. Symp. Soc. Study Devel. & Growth 15: 127-154.
- . Transients in the carbon dioxide gas exchange of algae. In Gaffron, H., et al. (ed.), Research in photosynthesis, pp. 430-443. (*Chlorella*, *Scenedesmus*, *Stichococcus*)
- GAFFRON, H., et al. (ed.). Research in photosynthesis. New York: Interscience Publishers. xiv + 524 pp. (Gatlinburg Conference, 1955)
- \*GALIFFY, Z. Taxonomic exposition of the Urrét Lake phytoplankton. Országos Mezőgazdasági Minőségviz-

- gáló Intézet, Evkőn. 3: 377-382. (ME)
- GANAPATI, P. N., AND D. V. SUBBARAO. On upwelling and productivity of the waters off Lawson's Bay, Waltair. *Current Sc.* 26(11): 347-348.
- GANAPATI, S. V. Limnological studies of two upland waters in the Madras state. *Arch. Hydrobiol.* 53(1): 30-61.
- GANDHI, H. P. A contribution to our knowledge of the diatom genus *Pinnularia*. *J. Bombay Nat. Hist. Soc.* 54(4): 845-852. (sp. nov.)
- . The fresh-water diatoms from Radhanagari-Kollapur. *Ceylon J. Sc., Biol. Sc.* 1(1): 45-57.
- \*———. Some common fresh-water diatoms from Gersoppa-falls (Jog-falls). *J. Univ. Poona, Sc. Sect.* 1957: 13-21.
- GAUCH, H. G. Mineral nutrition of plants. *Ann. Rev. Pl. Physiol.* 8: 31-64.
- GAYRAL, P. Algues d'eau douce du Maroc en culture pures (= unialgales). *Bull. Soc. Se. Nat. Phys. Maroc* 37: 83-87.
- . Résultats d'une prospection algologique à l'île de Mogador. *C. R. Acad. Sc.* 245(3): 358-360.
- GETTLER, L. Morphologie und Entwicklungsgeschichte der Zelle. *Fortschr. Bot.* 19: 1-17.
- . Die sexuelle Fortpflanzung der pennaten Diatomeen. *Biol. Rev.* 32(3): 261-295.
- . Über die Paarung bei *Navicula seminulum* und die Ausprägung der Geschlechtsmerkmale bei pennaten Diatomeen. *Ber. Dtsch. Bot. Ges.* 70(1): 45-48.
- . Zu morphologischen Variation und Ökologie auf kleinstem Raum von *Cyanophanon mirabile*. *Österr. Bot. Z.* 104(1/2): 100-114.
- GEMP, K. P., AND Z. G. PALENICHKO. [Algae of the White Sea.] Gosudar. Izdatel. Karolo-Finsk. SSR. Petrozavodsk. 40 pp. 1956. (R)
- GEOGHEGAN, M. J. The effect of some substituted methylureas on the respiration of *Chlorella vulgaris* var. *viridis*. *New Phytol.* 56(1): 71-80.
- GEORGE, E. A. A note on *Stichococcus bacillaris* Naeg. and some species of *Chlorella* as marine algae. *J. Mar. Biol. Ass. U. K.* 36(1): 111-114.
- GERLOFF, G. C., AND F. SKOOG. Availability of iron and manganese in southern Wisconsin lakes for the growth of *Microcystis aeruginosa*. *Ecology* 38(4): 551-556.
- . Nitrogen as a limiting factor for the growth of *Microcystis aeruginosa* in southern Wisconsin lakes. *Ecology* 38(4): 556-561.
- GERLOFF, J. Elektronenmikroskopische Untersuchungen an Diatomeenschalen. I. Der Bau der Schale von *Guinardia flaccida* (Castr.) Peragallo. *Ber. Dtsch. Bot. Ges.* 69(10): 499-504.
- . Einige Algen aus der Bucht von Daressalaam. *Willdenowia* 1(5): 757-770.
- GESSNER, F. Meer und Strand. 2. erweiterte Auflage. Berlin: VEB Deutscher Verlag der Wissenschaften, 426 pp.
- . Van Gölü. Zur Limnologie des grossen Soda-Sees in Ostanatolien (Türkei). *Arch. Hydrobiol.* 53(1): 1-22.
- GIBB, D. C. The free-living forms of *Ascophyllum nodosum* (L.) J. Ecol. 45(1): 49-83.
- GIBBS, M., AND O. KANDLER. (Abstr.) Influence of glucose on the distribution of C<sup>14</sup> in sugar formed during photosynthesis. *Fed. Proc.* 16(1): 185-186. (*Chlorella*)
- . Asymmetric distribution of C<sup>14</sup> in sugars formed during photosynthesis. *Proc. Natl. Acad. Sc.* 43(6): 446-451. (*Chlorella*)
- GIBBS, S. P., D. E. PHILPOTT, AND R. A. LEWIN. (Abstr.) Electron microscope studies of the flagella of *Chlamydomonas*. *Biol. Bull.* 113(2): 346.
- GIBBOR, A. Conversion of phytoplankton to zooplankton. *Nature* 179(4573): 1304 (*Artemia*)
- GILLIAM, M. E. Vegetation of the Exc estuary in relation to water salinity. *J. Ecol.* 45(3): 735-756.
- GODWARD, M. B. E. (Abstr.) Meiosis in *Spirogyra*. *Heredity* 11(2): 287.
- GOLDBERG, E. D. Biogeochemistry of trace metals. *In* Hedgpeth, J. W.

- (ed.), Treatise on marine ecology and palaeoecology, Vol. 1, pp. 345-357.
- GOLDMAN, D. E., AND W. W. LEPESCHKIN. Injury and recovery of *Spirogyra* exposed to ultrasound. *Exper. Cell Res.* 12(3): 507-517.
- GOLUEKE, C. G., W. J. OSWALD, AND H. B. GOTTAAS. Anaerobic digestion of algae. *Appl. Microbiol.* 5(1): 47-55.
- GONTAREVA, N. F. [Marine algae of Sikofan Island.] *Deleg. S'ezd Vses. Bot. Obsheh.* 1957, Tezisy Dokl. 5: 33-34 (R)
- GONZALEZ GUERRERO, P. La necrosis histol6sica en el Phragmiton (carrizal) de las lagunas de Ruidera. *An. Inst. Bot. Cavanilles [Madrid]* 14: 131-144. 1956. (necrosis produced by *Gomphonema*)
- . Divergencias talasof6cicas luso-espa1olas. *Ibid.* 15: 461-489. (marine zonation)
- GONZALVES, E. A., AND G. R. SONNAD. The genus *Bulbochaete* in western India. *J. Univ. Bombay n.s.* 25(5, sect. B): 1-15 (sp. nov.)
- GOODWIN, T. W. The nature and distribution of carotenoids in some blue-green algae. *J. Gen. Microbiol.* 17(2): 467-473.
- GÖSSEL, I. Über das Aktionsspektrum der Phototaxis chlorophyllfreier Euglenen und über die Absorption des Augenflecks. *Arch. Mikrobiol.* 27(3): 288-305. (*Euglena, Astasia*)
- GOWANS, C. S. (Abstr.) Genetic investigations on *Chlamydomonas eugametos*. *Diss. Abstr.* 17(4): 726-727. (Stanford University)
- GRAAF, F. de. The microflora and fauna of a quaking bog in the nature reserve "Het Hol" near Kortenhoeft in the Netherlands. *Hydrobiologia* 9(2/3): 210-317.
- GRANICK, S. Speculations on the origin and evolution of photosynthesis. *Ann. N. Y. Acad. Sc.* 69(2): 292-308. 1956. (incl. chloroplast structure)
- . Chloroplast structure and its relation to photosynthesis. In Gaffron, H., et al. (ed.), *Research in photosynthesis*, pp. 459-463. (*Euglena, Chlorella*)
- GRAU, C. R., AND N. W. KLEIN. Sewage-grown algae as a feedstuff for chicks. *Poultry Sc.* 36(5): 1046-1051. (*Chlorella, Scenedesmus*)
- GREEN, J. Parasites and epibionts of *Cladocera* in rock pools of the Tvarminne archipelago. *Arch. Soc. Vanamo* 12(1): 5-12.
- GREEN, M., K. I. ALTMAN, J. E. RICHMOND, AND K. SALOMON. Role of formate in the biosynthesis of chlorophyll *a*. *Nature* 179(4555): 375. (*Chlorella*)
- GREENWOOD, A. D., I. MANTON, AND B. CLARKE. Observations on the structure of the zoospores of *Faucheria*. *J. Exper. Bot.* 8(22): 71-86.
- GRELL, K. G., AND K. E. WOHLFARTH-BOTTERMANN. Licht- und elektronenmikroskopische Untersuchungen an den Dinoflagellaten *Amphidinium elegans* n. sp. *Z. Zellf. Mikr. Anat.* 47(1): 7-17.
- GRENAGER, B. Norsk Institutt for tang- og tarefors6kning. *Blyttia* 15(2): 72-75.
- . Second International Seaweed Symposium. *Ibid.* 75-76.
- . Algological observations from the polluted area of the Oslofjord. *Nytt Mag. Bot.* 5: 41-60.
- GRØZE, V. N. [The chief features in the hydrobiology of Lake Tajmyr.] *Trudy Vses. Gidrobiol. Obsheh.* 8: 183-218. (R)
- GRISEBACH, H., R. C. FULLER, AND M. CALVIN. Metabolism of thioctic acid in algae. *Biochim. et Biophys. Acta* 23(1): 34-42. (*Scenedesmus, Chlorella*)
- GRÖNBLAD, R. Observations on the conjugation in *Netrium digitus*. *Bot. Not.* 110(4): 468-472.
- GRÖNTVED, J. A sampler for underwater macrovegetation in shallow waters. *J. Conseil.* 22(3): 293-297.
- GRÖNTVED, J., AND E. STEEMANN NIELSEN. Investigations on the phytoplankton in sheltered Danish marine localities. *Medd. Komm. Danm. Havunders., ser. Plankton*, 5(6): 1-52.
- GROSS, J. A., AND T. L. JAHN. (Abstr.) Photo- and thermokinetics of *Euglena* growth. *J. Protozool.* 4 (suppl.): 8.

- GROSS, J. A., S. K. WIRTSCHAFTER, E. BERNSTEIN, AND T. W. JAMES. Monochromatic microscopy of *Euglena*. Trans. Am. Micr. Soc. 75(4): 480-483.
- GUARINI, M. C. Comportamento di *Nitophyllum punctatum* Grev. sulla Costa Barese (Puglia). Nuovo Giorn. Bot. Ital. n.s. 64(1/2): 276-282.
- GUNTER, G. Temperature. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 159-184.
- HALL, R. P. Induced resistance to sulfonamides in *Chilomonas paramecium*. J. Protozool. 4(1): 42-48.
- . (Abstr.) Resistance to isonicotinic acid hydrazide accompanied by susceptibility to sulfanilamide in *Chilomonas*. *Ibid.* 4(suppl.): 17.
- . Cytoplasmic inclusions of the plant-like flagellates. III. Bot. Rev. 23(5): 313-319.
- HALLDAL, P. Importance of calcium and magnesium ions in phototaxis of motile green algae. Nature 179 (4552): 215-216 (*Platymonas*)
- . Effect of light and temperature on pigment ratios in blue-green algae. Carnegie Inst. Wash. Year Book 56: 272-275. (*Anacystis, Anabaena*)
- . Phototaxis in motile algae. *Ibid.* 278-279. (*Platymonas*)
- HALLDAL, P., H. S. HUANG, AND C. S. FRENCH. Growth patterns of various algae in crossed gradients of light intensity and temperatures. *Ibid.* 275-278. (*Anabaena, Anacystis, Cyanidium, Chlorella*)
- HAMMANN, A. Assimilationszahlen submerser Phanerogamen und ihre Beziehung zur Kohlensäureversorgung. Schweiz. Z. Hydrol. 19(2): 579-612. (incl. data for *Chara, Mougeotia, Spirogyra, Chlorella*; experiments with *Chlorella*)
- HÄMMERLING, J. Nucleus and cytoplasm in *Acetabularia*. C. R. 8me Congr. Int. Bot. 10: 87-103.
- . Proteinsynthesis, nuclear growth and activity; their control by energy production; their relations to morphogenesis. Cytologia (supl.): 40-41. [Proc. Int. Genetics Symp. 1956]
- HAMPSON, M. A. The laverbread industry in South Wales and the laverweed. Gt. Brit., Minis. Agr. Fish & Food, Fish. Invest., ser. 2, 21(7): 1-8. (*Porphyra leucosticta, P. umbilicalis*)
- HANNA, G. D. Annotated bibliography. Silicoflagellata. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 1073-1074.
- HARDER, R., AND B. BEDERKE. Über Wachstumsversuche mit Rot- und Grünalgen (*Porphyridium cruentum, Tractiella intricata, Chlorella pyrenoidosa*) in verschiedenfarbigem, energiegelichen Licht. Arch. Mikrobiol. 28(2): 153-172.
- HARRIS, K., AND D. E. BRADLEY. An examination of the scales and bristles of *Mallomonas* in the electron microscope using carbon replicas. J. Roy. Micr. Soc. 76(1/2): 37-46. (sp. nov.)
- HART, T. J. Notes on practical methods for the study of marine diatoms. J. Mar. Biol. Ass. U.K. 36(3): 593-597.
- HARVEY, H. W. Bio-assay of nitrogen available to two species of phytoplankton in an off-shore water. J. Mar. Biol. Ass. U.K. 36(1): 157-160. (*Phacodactylum, Chlorella*)
- HASE, E., Y. MORIMURA, AND H. TAMAYA. Some data on the growth physiology of *Chlorella* studied by the technique of synchronous culture. Arch. Biochem. & Biophys. 69: 149-165.
- HASEGAWA, Y., AND E. FUKUHARA. [A survey of the propagation of *Laminaria*. I.] Hokusuisi-Geppo 13: 434-444. (J)
- HASTINGS, J. W., AND B. M. SWEENEY. The luminescent reaction in extracts of the marine dinoflagellate, *Gonyaulax polyedra*. J. Cell. & Comp. Physiol. 49(2): 209-225.
- . On the mechanism of temperature independence in a biological clock. Proc. Natl. Acad. Sc. 43(9): 804-811. (*Gonyaulax* luminescence)
- HATTORI, A. Studies on the metabolism of urea and other nitrogenous compounds in *Chlorella ellipsoidea*. I. Assimilation of urea and other

- nitrogenous compounds by nitrogen-starved cells. *J. Biochem.* 44(5): 253-273.
- HAUG, A., AND B. LARSEN. Carotene content of seaweed and seaweed meal. *Norsk. Inst. Tang- og Tareforskning Rep. no. 16.* 19 pp.
- HAUGE, H. V. Vangsvatn and some other lakes near Voss. A limnological survey in western Norway. *Folia Limnol. Scand.* no. 9. 189 pp.
- HAVLENA, F. Green unicellular algae. *Sborník CSAZV, živočišná výroba* 2(5): 389-396. (CzEG) (use and cultivation)
- HAYASHI, K., AND N. HARADA. Chemical studies on agar-agar manufacture in Gifu Prefecture (Part 7). *Res. Bull. Fac. Agr. Gifu Univ.* 8: 91-94. (JE)
- HAYASHI, K., AND K. NONAKA. [The same.] (Part 6). *Ibid.* 84-90. (JE)
- HAYASHI, T. On the gall of *Chara* and its protoplasmic abnormalities caused by Oribatid-mite. *J. Jap. Bot.* 32(3): 82-84. (JE)
- . Some dynamic properties of the protoplasmic streaming in *Chara*. *Bot. Mag. Tokyo* 70(828): 168-174.
- HAYATSU, R. Steroid studies. VII. Syntheses of sargasterol, fucosterol and  $C_{20}$ -isocholesterol. *Pharm. Bull. [Tokyo]* 5(5): 452-459.
- HÄYREN, E. Vidfäst *Fucus vesiculosus* vid Norrskär utanför Vasa. *Memoranda Soc. Fauna Flora Fenn.* 32: 143. (Sw)
- . Über fremde Körperchen im Schneec. *Ibid.* 144-148.
- . Anteckningar om åländsk vattervegetation. *Ibid.* 148-154. (Sw)
- HAYWARD, J. The periodicity of diatoms in bogs. *J. Ecol.* 45(3): 947-954.
- HEDGPETH, J. W. (ed.) Treatise on marine ecology and paleoecology. Vol. 1. Ecology. *Geol. Soc. Am. Mem.* 67, vol. 1. viii + 1296 pp. (Hedgpeth is author of following parts: Introduction, pp.1-16; Classification of marine environments, pp. 17-28; Concepts of marine ecology, pp. 29-52; Obtaining ecological data in the sea, pp. 53-86; Marine biogeography, pp. 359-382; Sandy beaches, pp. 587-608; Estuaries and lagoons. II. Biological aspects, pp. 693-729. Annotated bibliographies. General introduction, pp. 1011-1028.)
- HEDLIN, B., E. JULIN, AND A. PEKKARI. *Stratiotes-sjöar i Norrbotten.* *Svensk Bot. Tidskr.* 51(1): 317-343. (limnology, some algal records)
- HEIM, R. René Leboime 1885-1956. *Bull. Micr. Appl. n.s.* 7(6): 125-126.
- HELFRICH, P., AND A. J. KOHN. (Abstr.) Organic productivity in marine and terrestrial environments. *Proc. Hawaiian Acad. Sc.* 32: 27.
- HENRIKSSON, E. Studies in the physiology of the lichen *Collema*. I. The production of extracellular nitrogenous substances by the algal partner under various conditions. *Physiol. Pl.* 10(5): 943-948. (*Nostoc*)
- HERBST, F. Contribution à l'étude cytologique de quelques Cyanophycées. *Rev. Alg. n.s.* 3(3): 147-167.
- HERBST, F., H. F. LINSKENS, AND C. STUMM. Beobachtungen an Blaualgen. *Mikrokosmos* 46(8): 169-175. (cytology, morphology, movement, culture)
- HERRERA, J., AND R. MARGALEF. Hidrografia y fitoplancton de las costas de Castellón, de julio de 1956 a junio de 1957. *Invest. Pesq.* 10: 17-44.
- HEUKELLEKIAN, H., *et al.* A review of the literature of 1956 on sewage, waste treatment, and water pollution. III. Water pollution. *Sewage & Ind. Wastes* 29(7): 727-756.
- HIRANO, M. Flora desmidiarum japonicarum III. *Contrib. Biol. Lab. Kyoto Univ.* 4: 107-165. (*Cosmarium*) IV. *Ibid.* 5: 166-225.
- HIRANO, R., AND Y. OHSHIMA. Cultivation and preservation methods of marine protozoa. *Bull. Jap. Soc. Sc. Fish.* 23(7/8): 420-422. (JE)
- HIROSE, H. Preliminary report on the marine algae of Shiaku Islands, Seto Inland Sea, Japan. *Biol. J. Okayama Univ.* 3(1/2): 87-106.
- . [Obituary of Kathleen M. Drew.] *Bull. Jap. Soc. Phyc.* 5(3): 73. (J)
- HISADA, M. Membrane resting and action potentials from a protozoan, *Noctiluca scintillans*. *J. Cell. & Comp. Physiol.* 50(1): 57-71.

- HO, P. H. (Abstr.) Coastal marine population of the Cau-Da Bay (Nha Trang). Abstr. 9th Pac. Sc. Congr., p. 53.
- HÖFLER, K. Felix Eugen Fritsch. Verh. Zool.-Bot. Ges. Wien 96: 14-15.
- . Thioninfärbbarkeit der Zellmembranen von Süßwasseralgae. Protoplasma 48(4): 522-534.
- HÖFLER, K., AND A. DISKUS. Vitalfärbungen mit Nilblau und Brillantcresylblau. Protoplasma 48(4): 429-451. (mostly algae)
- HOLLANDE, A., AND M. ENJUMET. Sur une invasion des eaux du port d'Alger par *Chattoniella subsalsa* (*Hornellia marina* Sub.) Biecheler. Remarques sur la toxicité de cette chloromonadine. Bull. Trav. Stat. Aquicult. Pêche Castiglione 8: 271-280. (incl. morphology)
- HOLMES, R. W. Solar radiation, submarine daylight, and photosynthesis. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 109-128.
- \*HOLMES, R. W., M. B. SCHAEFER, AND B. M. SHIMADA. Primary production, chlorophyll and zooplankton volumes in the tropical Eastern Pacific Ocean. Bull. Inter-Am. Trop. Tuna Comm. 2(4): 129-169.
- HONJO, M. Studies on the active components of *Digenea simplex* Ag. and related compounds. XLIII. J. Pharm. Soc. Japan 77(6): 589-592. XLIV. *Ibid.* 593-597. XLV. *Ibid.* 598-603. (JE)
- HONSELL, E. Sulla presenza di succhi cellulari "vuoti" in *Nitzella mucronata* e *Chara crinita*. Protoplasma 48(3): 325-341.
- HOPKINS, S. H. Interrelations of organisms. B. Parasitism. In Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology, Vol. 1, pp. 413-428.
- HORTOBAGYI, T. La représentation graphique des microphytocoénoses. Rev. Alg. n.s. 3(2): 57-62.
- . Angaben zu den Algen Ungarns. II. Bot. Köz. 47(1/2): 31-42. (MG)
- . Qualitative Analyse der Algen in zwei Fischteichen an der Hortobágy. Hidrol. Köz. 37: 2-15. (MG)
- . Quantitative Analyse der Algen in den Fischteichen I-II und VII der Fischereiwirtschaft Hortobágy. *Ibid.* 289-305. (MG)
- . Neuere Daten zur Mikrovegetation des Fehértó neben Szeged. Acta Acad. Paedag. Agriensis 3: 341-343. (MG)
- . Algen aus dem Gewässer von Szilvásvárad. *Ibid.* 345-359. (MG)
- . Algen aus zwei Fischteichen von Hortobágy. *Ibid.* 361-408. (MG) (*Phacus*, *Pteromonas*, *Kirchneriella*, *Scenedesmus*, sp. nov.)
- . Relations phylogénétiques entre Cyanophyta Coclosphaeriaceae, Gomphosphaeriaceae et Woronichiniaceae. Acta Bot. Acad. Sc. Hung. 3(1/2): 9-17. (*Gomphosphaeria*, sp. nov.)
- IIORWITZ, L. Observations on the oxyhydrogen reaction in *Scenedesmus* and its relation to respiration and photosynthesis. Arch. Biochem. & Biophys. 66(1): 23-44.
- . Observations on the affect of metallic mercury upon some microorganisms. J. Cell. & Comp. Physiol. 49(3): 437-453. (incl. *Scenedesmus*, *Chlorella*)
- HORWITZ, L., AND F. L. ALLEN. Oxygen evolution and photoreduction in adapted *Scenedesmus*. Arch. Biochem. & Biophys. 66(1): 45-63.
- . Oxygen evolution and photoreduction by adapted *Scenedesmus*. In Gaffron, H., et al. (ed.), Research in photosynthesis, pp. 232-238.
- HOUCK, J. C., R. K. MORRIS, AND E. J. LAZARO. Anticoagulant, lipemia clearing and other effects of anionic polysaccharides extracted from seaweed. Proc. Soc. Exper. Biol. & Med. 96(2): 528-530.
- HOVASSE, R., AND L. JOYON. Les kystes siliceux de la chryomonadine *Hydrurus foetidus* Kirchner. C. R. Acad. Sc. 244(12): 1675-1678.
- . Sur l'ultrastructure de la chryomonadine *Hydrurus foetidus* Kirchner. *Ibid.* 245(1): 110-113.
- HOWARD, B. H. Hydrolysis of the soluble pentosans of wheat flour and *Rhodymenia palmata* by ruminal

- micro-organisms. *Biochem. J.* 67(4): 643-651.
- HULBERT, E. M. The taxonomy of unarmored Dinophyceae of shallow embayments on Cape Cod, Massachusetts. *Biol. Bull.* 112(2): 196-219. (*Amphidinium*, *Gymnodinium*, *Gyrodinium*, sp. nov.)
- HUMM, H. J., AND R. L. CAYLOR. The summer marine flora of Mississippi Sound. *Publ. Inst. Mar. Sc. [Univ. Texas]* 4(2): 228-264. [Abstr. in *Ass. Southeast. Biol. Bull.* 4(1): 13]
- HUNTER, N. W., AND R. HUNTER. Respiration in *Ulothrix zonata*. *Science* 126(185): 1246-1247.
- HUSTEDEL, H. Untersuchungen über die stoffliche Beeinflussung der Entwicklung von *Stigeoclonium falklandicum* und *Vaucheria sessilis* durch Tryptophanabkömmlinge. *Biol. Zentralbl.* 76(5): 555-595.
- HUSTEDT, F. Die Diatomeenflora des Flusssystemes der Weser im Gebiet der Hansestadt Bremen. *Abh. Naturw. Ver. Bremen* 34(3): 181-440. (*Cyclotella*, *Navicula*, *Nitzschia*, *Stauronacis*, *Surirella*, *Thalassiosira*, sp. nov.; *Actinocyclus*, *Fragilaria*, *Frustulia*, comb. nov.)
- HUTCHINSON, G. E. A treatise on limnology. Vol. 1. Geography, physics, and chemistry. New York: John Wiley & Sons. xiv + 1015 pp.
- HUTNER, S. H., A. AARONSON, H. A. NATHAN, AND A. CURY. (Abstr.) Metals and amino acids as temperature factors for *Ochromonas malhamensis*. *J. Protozool.* 4 (suppl.): 7-8.
- HUTNER, S. H., H. BAKER, S. AARONSON, H. A. NATHAN, E. RODRIGUEZ, S. LOCKWOOD, M. SANDERS, AND R. A. PETERSEN. Growing *Ochromonas malhamensis* above 35° C. *J. Protozool.* 4(4): 259-269.
- HUTNER, S. H., M. SANDERS, J. J. A. McLAUGHLIN, AND S. SCHER. Electrolyte requirements of protists and archaeometabolism. *Ann. N. Y. Acad. Sc.* 69(2): 286-291.
- HUVE, H. Sur l'individualité générique du *Tenarea undulosa* Bory 1832 et du *Tenarea tortuosa* (Esper) Le-moine 1911. *Bull. Soc. Bot. France* 104 (3/4): 132-140.
- . Sur une variété, nouvelle pour la Méditerranée, du *Caulerpa racemosa* (Forsk.) Agardh. *Rec. Trav. Stat. Mar. Endoume* 21: 67-73.
- HUVE, P. Contribution préliminaire à l'étude des peuplements superficiels des côtes rocheuses de Méditerranée orientale. *Rec. Trav. Stat. Mar. Endoume* 21: 50-66.
- HUZISIGE, H., T. TERADA, M. NISHIMURA, AND T. UEMURA. Effect of amino acids and streptomycin on the chlorophyll formation in *Euglena*. *Biol. J. Okayama Univ.* 3 (4): 209-222.
- ICHIYE, T. On the relationship between the plankton distribution and hydrographic condition in the adjacent seas of Japan. *Records Oceanogr. Works Japan (special number)*: 34-41.
- IGARASHI, H., S. KOMAKI, AND M. MATSUMURA. Preliminary report on copper content in the sea water and the marine algae of the Inlet of Toyohama, Ishikari Bay. *Bull. Hokkaido Reg. Fish. Res. Lab.* 16: 92-99. (JE)
- IKOMA, Y. Marine algae from the coast of Japan Sea in southern Honshû (from Noto to Nagato), Japan I. *Liberal Arts J. [Tottori Univ.]*, *Nat. Sc.* 7: 22-29. 1956. II. *Ibid.* 8: 14-23. 1957.
- IMAHORI, K. Similarity between the Characeae of Formosa and the Philippines. *Proc. 8th Pac. Sc. Congr.* 4: 563-568.
- . Study on the Charophytes-flora in Hokkaido (Japan) and its phyto-geographical characteristics. A preliminary note. *Sc. Rep. Kanazawa Univ.* 5(2): 55-83.
- INOUE, K., AND Y. ANDO. [Decomposition of alginic acid by micro-organisms. I. Decomposition of alginic acid by *Aerobacter aerogenes* type Y-11 strain and adaptive formation of alginase.] *J. Agr. Chem. Soc. Japan* 30(11): 742-746. (J)
- IRENEE-MARIE, Frère. Les *Micrasterias* de la région des Trois-Rivières. *Hydrobiologia* 9(1): 66-88.
- . Les *Staurastrum* de la région

- des Trois-Rivières. *Ibid.* 9(2/3): 145-209. (sp. nov.)
- ISAAC, W. E. The distribution, ecology and taxonomy of *Porphyra* on South African coasts. *Proc. Linn. Soc. London* 168(1/2): 61-65.
- . Some marine algae from Xai-Xai. *J. So. Afr. Bot.* 23(3): 75-102.
- \*ISHIMATSU, K. [Chemistry of seaweeds. I. Chlorophyceae and Rhodophyceae.] *Kagaku to Kōgyō* [Sc. & Ind.] 31: 316-327. (J) (review of chemical literature for Japan)
- ITAZAWA, Y. The diurnal variation of the oxygen content of the fish-culture-pond water. *Bull. Jap. Soc. Fish.* 22(11): 685-693. (JE)
- ITO, T. Chlorine contents and plankton fauna of eel-culture ponds on the west coast of Ise Bay. *Rep. Fac. Fish. Pref. Univ. Mie* 2(3): 473-501. (brief mention of dinoflagellates)
- . Studies on the "Mizukawari" in eel-culture ponds. VI. The relations between the growth of *Branchionus plicatilis* and the quantity of phytoplankters. *Ibid.* 502-508. VII. The relation between the feeding habit of *Branchionus plicatilis* and the size of phytoplankters. (with T. Iwai) *Ibid.* 509-516. (JE)
- IVANOV, A. I. [Peculiarities of the dissemination and development of the phytoplankton of the northwestern part of the Black Sea.] *Deleg. S'ezd Vses. Bot. Obshch.* 1957, Tezisy Dokl. 5: 19-20. (R)
- IWASAKI, H., AND C. MATSUDAIRA. Studies on the physiology of a laver, *Porphyra tenera* Kjellm. III. Chemical factors influencing upon the photosynthesis. *Tōhoku J. Agr. Res.* 8(1): 47-54.
- IYENGAR, M. O. P. On the structure and life-history of *Cylindrocapsopsis indica* gen. et sp. nov., a new member of the *Cylindrocapsaceae*. *J. Madras Univ.* 27B: 49-70.
- JAASUND, E. Marine algae from northern Norway II. *Bot. Not.* 110(2): 205-231. (*Halosiphon*, gen. nov. *Chordaceae*)
- JACKSON, D. S. Connective tissue growth stimulated by carrageenin. I. The formation and removal of collagen. *Biochem. J.* 65(2): 277-284.
- JACOBI, G. Fermente des Aminosäurestoffwechsels in *Ulva lactuca*. *Naturwissenschaften* 44(8): 265-266.
- . Enzyme des Kohlenhydratstoffwechsels in Extrakten von *Ulva lactuca*. *Planta* 49(1): 1-10.
- . Enzyme des Aminosäure-Stoffwechsels in *Ulva lactuca*. Transaminasen und Aminosäure-Dehydrogenasen. *Ibid.* 49(6): 561-577.
- . Vergleichend enzymatische Untersuchungen an marinen Grün- und Rotalgen. *Kiel. Meeresf.* 13(2): 212-219.
- JACOBSON, B. S. (Abstr.) Effects of dose fractionation on lethality in *Chlamydomonas*. *Rad. Res.* 7(3): 324.
- . Evidence for recovery from X-ray damage in *Chlamydomonas*. *Ibid.* 7(4): 394-406.
- JAKOB, H. Etudes sur certaines substances métaboliques libérées dans le milieu de culture par le *Nostoc muscorum* Ag. *C. R. Acad. Sc.* 244(14): 1968-1969.
- JALAS, J. [About green bread and *Chlorella*-ice cream.] *Luonnon Tutk.* 61(4): 109-112. (Fi)
- JÄRNEFELT, H. Zooplankton und Humuswasser. *Ann. Acad. Sc. Fenn., ser. A. IV.* 31. 14 pp. 1956.
- JENKINS, P. G. (Abstr.) Seasonal changes in the phytoplankton as indicated by spectrophotometric chlorophyll estimations 1952-53. *J. Mar. Biol. Ass. U. K.* 36(2): 438.
- JENSEN, A. J. C. [Plankton:] Observations at Bornholm. *Annal. Biol.* 12: 113.
- JOHNSON, J. H. (Abstr.) Comparison of the calcareous algal flora of recent and fossil reefs. *Abstr. 9th Pac. Sc. Congr.*, pp. 54-55.
- JOHNSON, L. P. Key to some common freshwater protozoa. *Bios* [Mount Vernon] 27(1): 3-32.
- JOHNSON, M. W. Plankton. In *Hedgpeth, J. W. (ed.), Treatise on marine ecology and paleoecology*, Vol. 1, pp. 443-459.
- JOHNSON, T. W. On the marine phycomycete *Thraustochytrium prolif-*

- erum*. Brit. Myc. Soc. Trans. 40 (2): 292-294. (on *Bryopsis plumosa*)
- JOLIOU, P. Etude de la vitesse des échanges d'oxygène des algues *Chlorella pyrenoidosa* au début de la période d'illumination. C. R. Acad. Sc. 244(22): 2736-2739.
- JOLY, A. B. Contribuição ao conhecimento da flora ficológica marinha da baía de Santos e arredores. Univ. São Paulo Bol. Bot. 14. 199 pp. (*Gelidiella*, *Leptofaucha*, *Lomentaria*, *Spermothamnion*, *Mesothamnion*, *Ceramium*, sp. nov.)
- JONES, R. F. Variation of nitrogen and carbohydrate constituents during the development of *Himantalia elongata* (L.) S. F. Gray. Biol. Bull. 112(1): 81-91.
- JONES, R. F., AND L. R. BLINKS. The amino acid constituents of the phyco bilin chromoproteins of the alga *Porphyra*. Biol. Bull. 112(3): 363-370.
- JONES, W. E. A note on the genus *Cordylecladia* J. Agardh (algae: Rhodophyceae). Ann. & Mag. Nat. Hist., ser. 12, 10(109): 70-71. (morphology, taxonomy)
- . (Abstr.) Some aspects of growth and development in *Gracilaria verrucosa* (Huds.) Papenf. Phyc. Bull. 5: 16.
- . *Gracilaria erecta*. *Ibid.* 44. (taxonomy note)
- JONSSON, J. Kisilthörungar í Seltjarnarmónum. Náttúrufræðingurinn 26(4): 199-205. (IsE) (diatoms in submerged peat)
- JONSSON, S. Sur la reproduction et la sexualité de *Acosiphonia spinescens* (Kütz.) Kjellm. C. R. Acad. Sc. 244(9): 1251-1254.
- . La fragmentation du cytoplasme chez le *Siphonocladus pusillus* (Kütz.) Hauck, Siphonale. *Ibid.* 245(22): 1943-1946.
- JØRGENSEN, E. G. Diatom periodicity and silicic acid assimilation. Experimental and ecological investigations. Dansk Bot. Ark. 18(1). 54 pp.
- JOSHI, M. C. On the occurrence of *Fritschiella tuberosa* Iyeng. in Piliani (Rajasthan). J. Bombay Nat. Hist. Soc. 54(4): 970-973.
- JURILJ, A. Diatomées épizootiques sur les copépodes. Acta Bot. Croat. 16: 93-104. (ScF) (*Hormophora*, gen. nov.; *Fragilaria*, *Gomphonema*, *Cymbella*, sp. nov.)
- KALLIO, P. Studies on artificially produced diploid forms of some *Micrasterias* species (Desmidiaceae). Arch. Soc. Vanamo 11(2): 193-204.
- KALJUGINA, A. A. [Composition and distribution of algae on the Winter Coast of the White Sea.] Deleg. S'ezd Vses. Bot. Obsch. 1957, Tezisy Dokl. 5: 37-38. (R)
- . [Specific composition and distribution of algae in the vicinity of the Winter Coast of the Dvina Gulf of the White Sea.] Bot. Zhurn. 42 (4): 628-634 (R)
- KAMIYA, N., AND K. KURODA. Cell operation in *Nitella*. I. Cell amputation and effusion of the endoplasm. Proc. Japan Acad. 33: 149-152. II. Behaviour of isolated endoplasm. *Ibid.* 201-205. III. Specific gravity of the cell sap and endoplasm. *Ibid.* 403-406.
- KAMIYA, T. *Vaucheria* in Aichi Prefecture. Hokuriku J. Bot. 6(4): 107-110.
- KAMPTNER, E. Josef Schiller. Zu seinem achtzigsten Geburtstag. Arch. Hydrobiol. 53(3): 434-435.
- KANDLER, O. Zur Frage einer photosensibilisierten Phosphorylierung in Hefe. Naturwissenschaften 44(13): 378. (comparison with *Chlorella*)
- . Identifizierung von radioaktiver Hamamelonsäure aus *Chlorella* nach kurzfristiger Photosynthese in  $C^{14}O_2$  und hohen KCN-Konzentrationen. *Ibid.* 44(21): 562-563.
- . Über die Beziehungen zwischen Phosphathaushalt und Photosynthese. IV. Zur Frage einer stöchiometrischen Beziehung zwischen  $CO_2$ -Reduktion und Phosphatumsatz. Z. Naturf. 12b(5): 271-280. (*Chlorella*)
- KANETSUNA, Y. Studies on the diatom-flora from the paddy-fields of Kyoto and its vicinity (1). Bull. Jap. Soc. Phyc. 5(3): 76-79 (JE)
- KANWISHER, J. Freezing and drying in intertidal algae. Biol. Bull. 113 (2): 275-285. (esp. *Fucus*, *Ascophyllum*)
- KAROHJI, K. Associations of plankton diatoms around Japan as investi-

- gated by underway samplings aboard the "Oshoro Maru" in Oct. & Dec. '52. Bull. Fac. Fish. Hokkaido Univ. 7(4): 271-283.
- KASAKI, H. Miscellany on Charophyta (1). Notes on the Charophyta-flora in Ibaragi Prefecture. J. Jap. Bot. 32(4): 124-125. (JE)
- KASHIMURA, T. Lake Tsuta and its vegetation. Se. Rep. Tôhoku Univ., Biol. 22(2): 89-98. 1956. (incl. Characeae)
- . Die Verteilung des gelösten Sauerstoffs im Tsuta-See mit Rücksicht auf die bewurzelnden und schwebenden Pflanzen. Ecol. Rev. 14(3): 203-207.
- KASHIWADA, K., D. KAKIMOTO, AND K. KAWAGOE. Studies on vitamin B<sub>12</sub> in sea water. III. On the diurnal fluctuation of vitamin B<sub>12</sub> in the sea and its vertical distribution in the lake. Bull. Jap. Soc. Se. Fish. 23(7/8): 450-453. (JE)
- KASHIWADA, K., D. KAKIMOTO, T. MORITA, A. KANAZAWA, AND K. KAWAGOE. Studies on vitamin B<sub>12</sub> in sea water. II. On the assay method and the distribution of this vitamin B<sub>12</sub> in the ocean. Bull. Jap. Soc. Se. Fish. 22(10): 637-640. (JE) (*Euglena* bioassay)
- KATAYAMA, T., AND T. FUJIYAMA. Studies on the nucleic acid of algae with special reference to the desoxyribonucleic acid contents of the crown-gall tissues developed on *Porphyra tenera* Kjellm. Bull. Jap. Soc. Se. Fish. 23(5): 249-254. (JE)
- KATO, N. On the species of "Ceratum" (Dinoflagellata) from Manazuru and its vicinity. I. Se. Rep. Yokohama Nat. Univ., sect. 2, 6: 11-20.
- KATO, T., AND M. KAWAMURA. On the distribution of the diatoms which attached to the cultivating laver. Jap. J. Ecol. 6(1): 6-7. 1956. (JE)
- KAWABATA, S. On the structure of the frond and the reproductive organ of *Pachymeniopsis Yendoi* Yam. (syn. *Pachymenia carnososa* Yendo, non J. Ag.). Bull. Jap. Soc. Phyc. 5(1): 8-13 (JE)
- KAWAMURA, J. On the fauna and flora of a pond, Kagamiike of Toda-iji-Temple, Nara, especially on its plankton community. Jap. J. Ecol. 6(4): 173-176.
- KAWAMURA, T., AND M. ANRAKU. Limnological reconnaissance of Lake Nukabira, a reservoir in Hokkaido. Bull. Fac. Fish. Hokkaido Univ. 8(2): 87-95.
- KAWANA, T. [Recent deterioration of agar-agar seaweed beds due to the "Isoyake."'] Aquiculture 3(3): 1-11. 1956. (J)
- KAWARADA, Y. A contribution of microplankton observations to the hydrography of the northern North Pacific and adjacent seas. II. Plankton diatoms in the Bering Sea in the summer of 1955. J. Oceanogr. Soc. Japan 13(4): 151-155.
- KAWARADA, Y., AND M. OHWADA. [The same.] I. Observations in the western North Pacific and Aleutian waters during the period from April to July 1954. Oceanogr. Mag. 9(1): 149-158.
- KAWASHIMA, S. Notes on some marine algae from the northeastern Honshu, Japan (1). Bull. Jap. Soc. Phyc. 5(2): 50-56. (2). *Ibid.* 5(3): 67-73. (JE)
- KECK, K., AND H. STICH. The widespread occurrence of polyphosphate in lower plants. Ann. Bot. n.s. 21(84): 611-619. (incl. *Navicula*, *Fragilaria*, *Spirogyra*, *Zygnema*, *Mougeotia*, *Oedogonium*, *Acetabularia*, *Euglena*)
- KESSLER, E. Stoffwechselphysiologische Untersuchungen an Hydrogenase enthaltenden Grünalgen. I. Über die Rolle des Mangans bei Photoreduktion und Photosynthese. Planta 49(4): 435-454. II. Dunkelreduktion von Nitrat und Nitrit mit molekularem Wasserstoff. Arch. Mikrobiol. 27(2): 166-181. (*Ankistrodesmus*, *Scenedesmus*, *Chlorella*)
- . Untersuchungen zum Problem der photochemischen Nitratreduktion in Grünalgen. Planta 49(5): 505-523. (*Ankistrodesmus*)
- . Manganese as a cofactor in photosynthetic oxygen evolution. In Gaffron, H., et al. (ed.), Research in photosynthesis, pp. 243-249. (*Ankistrodesmus*)

- . Contributions to the problem of photochemical nitrate reduction. *Ibid.* 250-256. (*Ankistrodesmus*)
- KESSLER, E., W. ARTHUR, AND J. E. BRUGGER. The influence of manganese and phosphate on delayed light emission, fluorescence, photoreduction and photosynthesis in algae. *Arch. Biochem. & Biophys.* 71(2): 326-335. (*Ankistrodesmus*)
- KHAN, S. Culture of algae of the rice-fields of Kashmir. *Biologia [Lahore]* 3(1): 29-43.
- KIRIEVA, M. S. Tatyana Fedorova Shepova. *Akad. Nauk SSSR, Trudy Inst. Okeanol.* 23: 5-14. (R) (bibliography)
- KIRIEVA, M. S., AND T. F. SHCHAPOVA. [On the systematic composition and biomass of the seaweeds and higher vegetation of the Caspian Sea.] *Akad. Nauk SSSR, Trudy Inst. Okeanol.* 23: 125-137. (R)
- . [The bottom vegetation of the Krasnovodsk Gulf.] *Ibid.* 138-145. (R)
- KIRSCHNINCK, H. Agar, carrageenine, carrageenate. *Seifen-Ole-Fette-Wachse* 18(2): 519.
- KISELEV, I. A. [Algal flora of Lake Kara-Kul in Pamir.] *Deleg. S'ezd Vses. Bot. Obsheh.* 1957, Tezisy Dokl. 5: 11-13. (R)
- KISHIMOTO, U. Studies on the electrical properties of a single plant cell. Internodal cell of *Nitella flexilis*. *J. Gen. Physiol.* 40(5): 663-682.
- KISS, I. Meteorological analysis of algal bloom on Lake Balaton 1934. *Ann. Inst. Biol. (Tihany)* 24: 93-101. (ME) (*Microcystis*)
- . Die biologische Realität und Variabilität bei einigen pflanzlichen Mikroorganismen. *Acta Acad. Paedag. Szeged.* 2: 3-34. (MG)
- . Über die Planococcus-Haufen der *Spirulina platensis* und die Frage des *Microcystis*-ähnlichen Zustandes. *Ibid.* 35-65. (MG)
- KITCHING, J. A. Effects of high hydrostatic pressures on the activity of flagellates and ciliates. *J. Exper. Biol.* 34(4): 494-510. (incl. *Astasia*, *Chlamydomonas*, *Polytoma*)
- KITOU, M. Notes on a certain marine diatom. *J. Oceanogr. Japan* 13(3): 111-113.
- KITOU, M., AND O. ASAOKA. Seasonal variation of phytoplankton at the Ocean Weather Station "X" (1950-1952). 2. *Ibid.* 13(1): 23-27. (JE)
- KLAVESTAD, N. Paraspores in *Rhodochorton rothii* Naeg. *Nytt Mag. Bot.* 5: 61-62.
- . An ecological study of the vegetation in Hunnebuennen, an old oyster poll in south-eastern Norway. *Ibid.* 63-100.
- \*KLEEREKOPER, H. Une étude limnologique de la chimie de fond des lacs de l'Ontario méridional, Canada. *Univ. Paris.* 205 pp.
- KLEIN, L. Aspects of river pollution. London: Butterworths Scientific Publications. xii + 621 pp.
- KLEMPERER, H. G. The accumulation of iodide by *Fucus ceranoides*. *Biochem. J.* 67(3): 381-390.
- KLINGMÜLLER, W. Neue Standorte von Süßwasser-Rotalgen in der Umgebung von Giessen. *Ber. Oberhess. Ges. Nat. u. Heilk. Giessen* 28: 25-27.
- KLOTTER, H. E. Grünalgen. (Chlorophyceen.) Stuttgart: Franck'sche Verlagshandlung. 76 pp. (systematic treatment with keys)
- KNUDSON, B. M. Ecology of the epiphytic diatom *Tabellaria flocculosa* (Roth) Kütz. var. *flocculosa* in three English lakes. *J. Ecol.* 45(1): 93-112.
- KOBAYASHI, T. Diatom vegetation of Izu Katase, Yatsu and Yugashima spas. *Bot. Mag. Tokyo* 70 (825): 69-74. (JE)
- . Diatom vegetation of Shiobara spas. *Ibid.* 70(829/830): 232-237. (JE)
- KOBLENTS-MISHKE, O. I. [On phytoplankton production in the western North Pacific Ocean in spring of 1955.] *Dokl. Akad. Nauk SSSR* 116(6): 1029-1032. (R)
- KÖHLER, K. Neue Untersuchungen über die Sexualität bei *Dasyoladus* und *Chaetomorpha*. *Arch. Protistenk.* 102(2): 209-218.