

Index

- Acanthoceras zachariasii*, 55
- accumulation bodies, 97
- Achnanthus hungaria*, 55
- acritarch, 77, 78, 127
- Actinastrum*, 6
- akinete, 1, 3, 9, 10, 11, 13, 18
- Alldredge, A.L., 60
- Anderson, D.M., 77, 78, 92, 101, 104, 105, 106, 107, 108
- Anderson, O.R., 26, 50
- Ankistrodesmus*, 6
- anoxic conditions, 105
- Antia, N., 57, 59
- apical pores, 94
- archeopyle, 73, 75, 79, 94, 95, 96, 97, 127; formula, 95; precingular, 118
- Arpylorus antiquus*, 127
- Asmund, B., 34
- Asterococcus*, 7
- Atkinson, A.S., 13
- Bacteriastrum*, 49; *delicatulum*, 51, 53; *hyalinum*, 61
- Bacterosira*, 49
- Balech, E., 113, 114, 117, 122, 123
- Bassett, M., Jr., 5
- Beam, C.L., *see* Himes, M.
- benthic resting stages, 100
- Bibby, B.T., 26, 86, 93, 97, 100, 105
- Biekel, P., 9
- Binuclearia*, 7
- biogeography, boreal, 54, 55; neritic, 51, 53; oceanic, 51; polar, 54; temperate, 54; tropical, 54; zones, 125
- biological classification, 112
- biostratigraphy, 69
- Bitectatodinium*, 96, 118; *tepikiense*, 90, 92
- Bold, H.C., 23; *see also* Brown, R.M.
- Boltovskoy, A., 95
- Borodinella*, 6
- Borodinellopsis*, 6
- Bourne, N., 79
- Bourrelly, P., 5, 23, 24, 25, 26, 35, 36
- Bowers, B., 26
- Braarud, T., 73, 100, 102
- Bracteacoccus*, 6
- Bradford, M.R., 112, 121
- Brasier, M.D., 70, 102
- Brigantedinium: cariacense*, 92; *majusculum*, 93
- Bronikovsky, N., *see* Graham, H.W.
- Brooks, J., 13, 86, 109
- Brown, R.M., 5, 7, 14, 15, 16, 26
- Buchanan, R.J., 79
- Burg, C.A., *see* Trainer, F.R.
- Button, K.S., 13
- Calcidinellum*, 82; *eperosum*, 87
- carotenoid, 15
- Carr, N.G., *viii*; *see also*, Nichols, J.M.
- Catt, J.W., 13
- Cavalier-Smith, T., 11, 12, 14, 16
- cell size, diatom, 55
- cell wall (Chlorophyceae): biochemical composition, 13; morphology, 11
- Cerataulina*, 49; *pelagica*, 55, 57
- Ceratium*, 98, 113, 127; *cornutum*, 111; *birundinella*, 72, 83, 93, 101, 103, 104, 105, 107, 108, 109; *horridum*, 93, 111
- Chaetoceros*, 49, 53, 54, 55, 58, 62, 63; *anastomosans*, 53; *diadema*, 51, 56, 58, 61, 62, 63; *didymum*, 56, 61; *laciniosum*, 63; *lorenzianum*, 53; *melchersianum*, 54; *pavillardii*, 53; *pseudocurvisetum*, 55; *sociale*, 58; *sociale* f. *radians*, 57, 58, 63; *teres*, 58, 60, 63; *vanheurckii*, 58
- Chapman, D.J., *see* Ragan, M.A.
- Chapman, D.V., *viii*
- Chara*, 9
- Characium*, 6

- Chlamydomonas*, 7, 8, 10, 11, 13, 14, 15, 16; *moewusii*, 14, 16; *reinhardtii*, 12, 13, 15, 16
- Chlorella*, 6, 13
- Chlorococcum*, 6; *echinozygotum*, 11; *hypnosporum*, 3, 10, 11
- Chlorogonium*, 7
- chlorophyll synthesis, 62
- Chlorosarcina*, 6
- Chlorosarcinopsis*, 6
- Chlorosphaeropsis*, 6
- Chromulina*, 33
- Chronic, J., *see* McKee, E.D.
- Chrysidiastrum catenatum*, 33, 34
- Chrysolyskos planctonicus*, 35
- Cienkowski, L., 25, 26
- cingulum, 75, 79, 82
- Cladophora*, 6, 10
- Cladopyxis*, 82
- Cleve, P.T., 71
- clonal culture, ix
- Closterium*, 7
- Coccomyxa*, 6
- Coehen-Dazire, G., *see* Stanier, R.Y.
- Coelastrum*, 6
- Coleman, A.W., 3, 5, 9, 10
- Conrad, W., 33
- Cosmarium*, 4, 7; *botrytis*, 12
- Cox, E.J., *see* Ross, R.
- C/N ratio, 62
- Crawford, R.M., 55
- Crayton, M.A., 13
- Cronberg, G., 33, 34, 41
- Crucigenia*, 6
- Cryptocodinium cohnii*, 109
- Cyanobacteria, viii
- Cylindrocystis*, 7
- cyst, Chrysophycean; morphology, 33; plug, 25, 26, 31; pore, 26, 31; wall, 25, 26
- cyst, dinoflagellates, 69, 73, 76, 78; chorate, 89, 126; classification, 112; comparison to motile stages, 75, 89; dormancy, 98, 103, 104, 106, 107; ecological indicators, 122; encystment, 89, 98, 100, 101, 102, 103, 104; excystment, 89, 95, 98, 103, 106, 107, 108; features, 82, 88; features reflected, 73; formation, 100, 101; functions, 125–6; proximate, 89; role in life cycle, 89, 98; resting periods, 74, 105; sexually induced, 101; shape, 83; structure, 83; taxonomic criteria, 88, 95–7
- Dale, B., 62, 77, 78, 79, 88, 92, 93, 95, 98, 100, 101, 102, 103, 104, 105, 106, 109, 110, 112, 114, 117, 118, 120, 123, 124, 126, 127, 128, 129; *see also* Wall, D.
- Dangeard, P.A., 39
- Davey, R.J., 122, 126
- Davidson, S.E., *see* Evitt, W.R.
- Davis, C.O., 58, 59, 60, 61, 65
- Davis, J.S., 50, 59
- Deflandre, G., 33, 72, 86, 88
- depletion: nitrogen, 57; nutrient, 65
- Detonula*, 49; *conservacea*, 50, 58, 60, 61, 63
- diatom, *see* hypnospore
- Diatoma anceps*, 55
- Dichotomosiphon*, 1
- Dictyochloris*, 6
- Dictyococcus*, 6
- Dictyosphaerium*, 6
- Dinobryon*, 24, 27, 29, 31, 35, 41, 44, 45; *boregei*, 35; *crenulatum*, 35; *cylindricum*, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45; *divergens*, 27, 31, 35, 43; *sertularia*, 26, 35
- dinocyst, 74, 76
- dinoflagellates: culturing, 128; ecology, 121–2; naked, 94; taxonomy, 113; thecate, 94; toxic, 129
- Dinophysis*, 98, 113
- dinospore, 77
- Diplopeltopsis minor*, 92
- Diplopsalis lenticula*, 92
- Diplosalopsis orbicularis*, 92
- dispersal, 5
- dispersion, 126
- Dissodinium pseudocalani*, 77
- Ditylum*, 49
- diversity, structural diatoms, 49
- Dodge, J.D., 122; *see also* Bibby, B.T.; Chapman, D.V.
- Doflein, F., 25, 26, 36
- Dokell, P., *see* Turpin, D.
- dormancy, 62, 64
- Doucette, G.J., *see* Fryxell, G.A.
- Downie, C., *see* Sarjeant, W.A.S.
- Drebes, G., 55, 56, 57, 61; *see also* Elbrächter, M.; Stosch, H.A. von
- Dring, M.J., 10

Index

139

- Drum, R.W., 25
 drying, 105
Dubridinium caperatum, 92; *cavatum*, 92
 Durkin, E., 58, 59, 61
 Dürr, V.G., 86
 Duzer, D., *see* Rossignol-Strick, M.
 Eaton, G.L., 74, 114
 Ebersold, W.T., 10
 ecdysal cyst, 77
 ecdysis, 77, 79, 95
 Ehrenberg, C.G., 71, 82
 Eisenach, A., 72, 88
 Elbrächter, M., 77
 Elner, J.K., 32
 encystment, 64
 encystment, Chrysophycean extrinsic, 41; factors influencing, 39; frequency, 41, 42; intrinsic, 40
Ensiculifera, 88, 93
 Entz, G., 35
 epicyst, 75, 95
 epitheca, 75
 Erben, K., 10
 Erdtman, G., 72, 73, 123
 Eren, J., 93
 Esser, S.C., 27
Euastrum, 7
Eucampia, 49, 54
Eudorina, 7
Eunotia, 55; *soleirolii*, 49, 55, 58, 59, 61, 62
 Evitt, W.R., 70, 71, 72, 73, 77, 78, 82, 83, 94, 95, 102, 116; *see also* Piel, K.M.; Stover, L.E.; Wall, D.
Evittosphaerula paratabulata, 90
 excystment, 61, 64
 eyespots, 97
 Fecher, K., *see* Stosch, H.A. von
 Feldman, M.W., 17
 flagellar grooves, 82
 flagellar pores, 82, 94
 fossil dinoflagellate, 74, 76; cyst, 78
 Fott, B., 35, 36, 38, 39
Fragilaria oceanica, 54
 freezing, 105
 French, F.W., 55, 59, 60, 61, 62; *see also*, Hargraves, P.E.
 Friedberg, I., 15
Friedmannia, 6
 Fritsch, F.E., 1, 23, 76
 Fryxell, G.A., *viii*, 54; *see also* Hoban, M.A.
 Fulton, A.B., 11, 13
 Gaarder, K.R., 53
 gametes, 89, 100
 Garrison, D.L., *viii*, 60
 Gayral, P., 35, 38
 Geitler, L., 26, 35, 36, 38
 genetic diversity, 17
 geological times: Cretaceous, 127; Jurassic, 88; Lower Paleozoic, 127; Mesozoic, 72, 86; Miocene, 90; pre-Quaternary, 123; Quaternary, 73, 86, 123, 125, 126; Recent, 73, 90, 119, 126; Tertiary, 72, 86, 88; Upper Silurian, 127
 germination (Bacillariophyceae), 59, 61, 62
 germination, osmotic control, 16
 Gibson, V.R., *see* Grice, G.D.
Gloeococcus, 7
Gloeostysis, 7
 Gocht, H., 82, 94, 95
 Goldberg, I., *see* Friedburg, I.
Golenkinia, 6
Gonium, 7
Gonyaulax, 96, 98, 117, 118, 121, 126; *digitalis*, 73, 80, 92, 100, 101, 103, 104; *excavata*, 78, 80, 92, 97, 126, 129; *grindleyi*, 88, 92, 100, 101, 103, 104, 117; *monilata*, 92, 111; *polyhedra*, 72, 73, 88, 91, 92, 100, 102, 117, 118; *reticulatum*, 73; *scrippsae*, 80, 90, 92; *spinifera*, 80, 83, 90, 92, 96, 103, 104, 108, 117; *tamarensis*, 72, 78, 92, 101, 104, 106, 107, 108, 110
 Goodenough, U.W., 12; *see also* Minami, S.A.
 Goosey, J.D., 13
 Gowans, C.S., 16
 Graham, H.W., 113, 122
 Granick, S., *see* Sager, R.
 grazing, 63, 65
 Grice, G.D., 128
 Gritten, M.M., 33
 growth bands, 94; contractional, 102; exponential, 102
 Guillard, R.R.L., 16
 Gunning, B.E.S., *see* Atkinson, A.S.
Gymnodinium: pseudopalustre, 93, 111; *speas*, 92

- Gyrodinium resplendens*, 85
- Haas, C., *see* Gayral, P.
- Happéy-Wood, C.M., *see* Elnér, J.K.
- Hargraves, P.E., 49, 58, 59, 60, 61; *see also* French, F.W.
- Harland, R., 70, 74, 112, 123; *see also* Reid, P.C.
- Harrison, P.J., *see* Davis, C.O.
- Hart-Jones, B., *see* Dodge, J.D.
- Hasle, G.R., 54
- Haye, A., 25, 26
- Heaney, S.I., *see* Chapman, D.V.
- Helgolandinium subglobosum*, 109
- Hellebust, J.A., *see* Sheath, R.G.
- Hemicystodinium zoharyi*, 93, 120
- Hensen, V., 71
- Hern, S.C., *see* Taylor, W.D.
- Hibberd, D.J., 25, 26, 30, 31, 33, 36
- Himes, M., 109
- Hoban, M.A., 54, *see also*, Fryxell, G.A.
- Hoffman, L.R., 3
- Hollande, A., 25
- Hollibaugh, J.T., 58, 62; *see also*, Davis, C.O.
- Holm-Hansen, D., 5, 7
- hologamy, 35
- holomorph, 112, 116
- Hommersand, M.H., 15
- Hormotilopsis*, 7
- Hoshaw, R.W., 10, 12
- Hostetter, H.P., *see* Button, K.S.
- Hubbard, G.F., *see* Fryxell, G.A.
- Huber, G., 72, 101, 103, 104, 105, 106, 107, 108
- Hustedt, F., 54
- Hutchinson, G.E., 24, 41
- Hydrurus foetidus*, 29, 30
- hypnospore, 1, 9, 11, 13, 18; (diatoms) 49; formation, 56; intra-specific variation, 53; related to sexual reproduction, 55; survival, 59
- hypnozygote (chlorophyte), 1, 3, 9, 10, 11, 13, 18; (dinoflagellate), 74, 77, 78, 89, 109, 110
- hypocyst, 75, 95
- hypotheca, 75
- Hystrichosphaera*, 72, 73; *furcata*, 73
- hystrichospheres, 73
- Hystrix, 74
- Impagidinium*, 96, 119, 120; *aculeatum*, 127
- incubation, 73
- ingestion, 63
- intercalary bands, 112
- Iversen, J., 72
- John, A.W.G., *see* Reid, P.C.
- John, P.C.L., *see* Atkinson, A.S.
- Johnson, C., *see* Brown, R.M.
- Jousé, A.P., 51
- Jux, U., 86
- Karayeva, N.I., *see* Ross, R.
- Karsten, G., 54
- Kentrosphaera*, 6
- Kephryron: mastigophorum*, 35; *rubriclaustri*, 35; *translucens*, 35
- Kephriopsis: cincta*, 35; *conica*, 35; *cylindrica*, 35; *entzii*, 35
- Kidson, E.J., *see* Williams, G.L.
- Kinosita, J.H., *see* Goosey, J.D.
- Kirchneriella*, 6
- Klebs, G., 10
- Klebsormidium*, 7; *flaccidum*, 3
- Kofoid, C.A., 113, 117
- Korn, E.D., *see* Bowers, B.
- Korschikov, A.A., 36
- Kowallik, K., *see* Stosch, H.A. von
- Krieger, W., 35, 36
- Kristiansen, J., 35, 36
- Lagerheimia*, 6
- Lambou, V.W., *see* Taylor, W.D.
- Larson, D.A., *see* Brown, R.M.
- Lebour, M.V., 122
- Lefèvre, M., 88
- Lehman, J.T., 25
- Lembi, C.A., 5, 10, 13, 14
- Lentin, J.K., 76, 95; *see also* Evitt, W.R.
- Leopold, E.B., *see* McKee, E.D.
- Lepailleur, H., *see* Gayral, P.
- Leptocylindrus*, 49; *danicus*, 51, 53, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64
- Lewin, R.A., 13, 16; *see also* Schulz-Baldes, M.
- Lewis, C.M., 129; *see also* Yentsch, C.M.
- life cycle, 10
- light intensity, 61, 62

Index

141

- light limitation, 10
- Lingulodinium*, 118; *machaerophorum*, 88, 92
- Lister, T.R., 78, 97
- Loeblich, A.R., 114; *see also* Tuttle, R.C.
- Loeblich, L.A., *see* Loeblich, A.R.
- Lohmann, H., 71
- Lund, J.W., 6, 55
- McCauley, M.J., *see* Stein, J.R.
- MacEntee, F.J., 5, 7
- Mack, B., 35, 36, 38, 39
- McKee, E.D., 73
- McLean, R.J., 2, 10, 15, 16
- Mague, F.C., *see* Yentsch, C.M.
- Mallomonas*, 24, 42; *acaroides*, 42; *akrokomonas*, 34, 42; *caudata*, 27, 29, 31, 33, 35; *crassisquama*, 42; *torquata*, 34
- Mann, D.B., *see* Ross, R.
- Mantell, G.A., 71
- Manum, S.B., 86
- Margaleff, R., 24
- Mattox, K.R., 3; *see also* Stewart, K.D.
- meiocyte, 112
- Melosira*, 55; *italica*, 55
- Meridion circulare*, 55
- Mesotaenium dodekahedron*, 9
- Meyer, R.L., 25, 26, 35
- Micractinium*, 6
- microfossils, 69
- Microspora*, 7
- Millioud, M.E., *see* Evitt, W.R.
- Minami, S.A., 12
- Mitchell-Innes, B., *see* Smayda, T.J.
- mitosis, acytokinetic, 56, 61
- Mongar, I.L., 13
- Morel, F., *see* Anderson, D.M.
- Morey-Gaines, G., 93
- Morris, F.A., *see* Taylor, W.D.
- Morris, M.K., *see* Taylor, W.D.
- Morzaadec-Kerfourn, M.T., 74
- Multispinula quanta*, 92, 121
- Munch, C.S., 33
- Nannoceratopsis*, 95
- Nannochloris*, 6
- Navicula cuspidata*, vii
- Neff, R.H., *see* Neff, R.J.
- Neff, R.J., 26
- Nematosphaeropsis*, 96, 119; *labyrinthus*, 90, 92, 126
- Neochloris*-like, 6
- Neospongiococcum*, 6
- Netzel, H., *see* Gocht, H.
- Nichols, J.M., viii
- Nipkow, F., *see* Huber, G.
- nitrogen depletion, 9
- Nitzschia grunowii*, 54
- Noctiluca miliaris*, 109
- Nordli, E., 72, 73, 100
- Norris, G., 82, 83, 95, 112, 116
- nuclear cyclosis, 97
- Nygaard, G., 33
- Ochromonas*, 33, 35; *tuberculata*, 29, 30, 31
- Odontella*, 49, 54
- Oedogonium*, 3, 7; *foveolatum*, 3
- Omad, I., *see* Friedberg, I.
- Omanodinium alticinctum*, 121
- Oocystis*, 6, 8
- Operculodinium*, 118; *centrocarpum*, 92; *israelianum*, 92; *psilatum*, 92
- operculum, 95; opercular pieces, 95
- Oppenheimer, C.H., 65
- Ourococcus*, 6
- Paasche, E., 53, 57
- Paddock, T.B.B., *see* Ross, R.
- Palaeoperidinium*, 82; *pyrophorum*, 82
- paleoclimatic indicators, 107
- paleolimnological indicators, 33
- paleontological classification, 122, 114–16
- Palmella*-like, 7
- Palmelloccus*, 6
- Palmer, C.M., 5, 7
- Pandorina*, 2, 3, 7, 13; *morum*, 9, 14
- Pankratz, H.S., *see* Drum, R.W.
- paracingulum, 75, 82, 88, 94
- paraplate, 75, 88, 95
- parasulcus, 75, 88, 94
- parasuture, 75; ridges, 88
- paratabulation, 94, 96, 114
- Parker, B.C., 12, 13
- Pascher, A., 25
- Pealmutter, N.L., *see* Lembi, C.A.
- Pediastrum*, 1, 6
- pellicle cyst, 77, 78
- Penium*, 7
- Peridinites*, 82, 95; *globosus*, 87

- Peridinium*, 126; *cinctum*, 86, 93, 104, 106, 108, 111; f. *ovaplano*, 93; *faeroense*, 78, 91, 92, 97, 100, 103, 109; *gatunense*, 93, 111; *inconspicuum*, 93; *limbatum*, 93; *ponticum*, 93; *volzii*, 93, 111; *willei*, 93, 111; *wisconsinense*, 93
- Pessoney, G.F., 3
- Pessoney, G.F., *see* McLean, R.J.
- Pfiester, L.A., 93, 101, 104, 105, 106, 110, 111, 112
- phylogeny, diatoms, 50, 51, 53
- physiology, 62
- Pickett-Heaps, J.D., 15, 16, 31; *see also* Staehelin, L.A.
- Piel, K.M., 95, 110, 114, 127
- Pithophora*, 1, 4, 10, 13, 14
- Planinosphaeridium*, 96; *membranaceum*, 92
- Planktosphaeria*, 6
- planozygote, 89, 91, 103, 109, 110, 112
- plate, 75; cingular, 113; pattern, 94; sulcal, 113; tabulation, 94, 114; taxonomic criteria, 94; thecal, 95
- Platydorina*, 13
- Pleodorina*, 7
- Pleurastrum*, 7
- Polykrikos kofordi*, 93; *schwartzii*, 71, 85, 93, 120
- population, refuge, 25, 43
- population biology, 9, 17
- Porosira glacialis*, 55
- Porter, K.G., 63
- Prakash, A., 78
- Prasiola*-like, 7
- primitive characteristic, 64
- processes, 75
- Proctor, V.W., 3, 9
- propagation, 125
- Prorocentrum*, 98
- protection, 125
- Protoceratium reticulatum*, 72, 100
- Protococcus*, 7
- Protoperidinium*, 86, 96, 98, 106, 126; *avellana*, 92; *claudicans*, 80, 92; *compressum*, 92; *conicoidea*, 81, 92, 126; *conicum*, 92, 94, 121; *denticulatum*, 85, 92; *excentricum*, 92; *latisimum*, 92; *leonis*, 84, 92; *minutum*, 92; *nudum*, 92; *oblongum*, 81, 93, 100; *pentagonum*, 93; *punctula-* *tum*, 93; *pyrophorum*, 94; *subinerme*, 93, 121
- Protosiphon*, 6
- Prowazek, S., 25, 26, 39
- Pseudopedinella erkensis*, 43
- Pseudotetracystis*, 7
- Pseudulvella*-like, 7
- Pyrobotrys*, 7
- Pryodinium bahamense*, 93, 104, 107, 108, 117, 120
- Pyrophaecus horologium*, 79, 80, 93, 100, 104; *vancampoae*, 93, 95, 117
- Radiococcus*, 6
- Radiosphaera*, 6
- Ragan, M.A., 116
- Raphidonema*, 7
- red tides, 129
- Reid, P.C., 70, 71, 79, 112, 117, 119, 120, 123, 124, 128
- Reinsch, P.F., 71
- resting cyst, 76, 78
- resting spore: (*Bacillariophyceae*) formation, 56; (*Dinophyceae*), 76, 78; evolutionary pressures, *viii*; germination, *vii*; longevity, 57; production, *vii*; strategy, *vii*, *viii*
- Rhizoclonium*, 7
- Rhizosolenia*, 49, 54, 55; *setigera*, 61
- Rogers, J., *see* Davey, R.J.
- Ross, R., 51, 52
- Rossignol, M., 74, 123
- Rossignol-Strick, M., 74
- Roya*, 7
- Ruse, R.H., *see* Morey-Gaines, G.
- Ruttner, F., 24, 41
- Sager, R., 10, 6
- Sandgren, C.D., 25, 26, 27, 31, 33, 36, 37, 38, 40, 41
- Sarjeant, W.A.S., 70, 71, 72, 76, 88, 101, 102, 112, 116, 127; *see also* Williams, G.L.
- Saunders, R.P., 55
- Sawa, T., *see* Sheath, R.G.
- Scenedesmus*, 6, 13
- Scherffel, A., 24, 25, 26
- Schluchting, H.E., Jr., 5, 7
- Schmid, A.M., *vii*
- Schroederia*, 6
- Schulz-Baldes, M., 13

Index

143

- Scrippsiella*, 88; *sweenyae*, 93; *trochoidea*, 93, 100, 101
- Seibert, D.L.R., *see* Davis, C.O.; Holibaugh, J.T.
- selection, 17
- Selenastrum*, 6
- sexual cycles (dinoflagellates), 111, 125
- Shanks, A.L., 60, 64; *see also*, Silver, M.W.
- Shaw, G., *see* Brooks, J.
- Sheath, R.G., 25, 35, 41
- silica deposition vesicle (SDV), 25, 27, 28, 29, 30; pore, 31
- Silver, M.W., 54, 60, 64
- Simonsen, R., 50, 53; *see also* Ross, R.
- Sims, P.A., *see* Ross, R.
- sinking, 53; rates, 60
- Sirogonium*, 4
- Skeletonema costatum*, 65
- Skuja, H., 24, 25, 35, 36
- Skvarla, J.J., *see* Pfister, L.A.
- Smayda, T.J., 59
- Smith, G.M., 23
- Smol, J.P., 33
- Spencer, D.F., *see* Lembi, C.A.
- Sphaerelloccystis*, 7
- Sphaerocystis*, 7; *schroeteri*, 63
- Spiniferites*, 90, 96, 118, 119; *bentori*, 92; *bulloideus*, 92; *cruciformis*, 119; *elongatus*, 80, 81, 92, 121; *inequalis*, 119; *membranaceus*, 92; *mobilis*, 92; *ramosus*, 92; *scabrinatus*, 92
- Spirogyra*, 5, 7, 9
- Spondylomorium*, 7
- Spongiochloris*, 1, 10, 15
- Spongiochloris*-like, 6
- Spongicoccum*, 6
- spore genera, 51
- sporopollenin, 13, 109
- Staehelin, L.A., 11, 13
- Stanier, R.Y., *viii*
- Starr, R.C., 10, 11, 12
- statospore, chrysophycean, 24, 25; binucleate, 35; uninucleate, 35
- Staurastrum*, 7
- Steidinger, K.A., 122; *see also* Walker, L.M.
- Stein, J.R., 9
- Stelladinium stellatum*, 92
- Stenocalyx: inconstans*, 35; *klarnetti*, 35; *monilifera*, 35; *spirale*, 35; *tubiforme*, 35
- Stephanopyxis*, 49, 54, 56, 61; *palmeriana*, 56, 58, 61; *turris*, 56, 58, 60, 63
- Stewart, K.D., 31
- Sichococcus*, 7
- Stigeoclonium*, 6
- storage product, 62
- Stosch, H.A. von, 49, 55, 56, 58, 61, 62, 77, 89, 93, 97, 101, 105, 106, 108, 109, 110, 111
- Stover, L.E., 116, 118, *see also* Evitt, W.R.
- strategy (evolution, diatoms), 65
- strategy (evolution, dinoflagellates), 127
- sulcus, 75, 79
- suture, 75
- Synura*, 24; *petersenii*, 35; *spinosa*, 41, 42
- Taylor, F.J.R., 77, 78, 114, 122, *see also* Turpin, D.
- Taylor, W.D., 5, 7
- Tectatodinium*, 96, 118, 119; *pellitum*, 92; *psilatum*, 119
- temperature, 106
- temporary cyst, 77, 78, 80, 109, 110; stages in dinoflagellate life cycle, 78
- Tetracystis*, 7
- Tetradron*, 6, 8
- Tetraspora*, 1, 7
- Thalassiosira*, 49, 54; *nordenskiöeldii*, 50, 58, 61
- thecal plates, 82
- Theil, G., *see* Stosch, H.A. von
- Thimann, K.V., *see* Hommersand, M.H.
- Thomas, W.H., *see* Davis, C.O.; Holibaugh, J.T.
- Tippett, R., 34
- Trachelomonas*, 13
- Trainer, F.R., 8
- Trebouxia*, 6
- Trent, J.D., *see* Shanks, A.L.; Silver, M.W.
- Trebularia*-like, 6
- trichocyst pores, 94

144

Index

- Trinovantedinium: capitatum*, 93; *sabrinum*, 92
- Trochischia*, 71
- Tuberculodinium vancampoae*, 93
- Turpin, D., 107, 108
- Tuttle, R.C., 109
- Ulotrix*, 7, 10; *fimbriata*, 3
- Ulva*, 17
- uniparental inheritance, 16
- Uroglena*, 24, 27, 29, 31, 33; *americana*, 27, 29, 31; *volvox*, 27, 29, 30, 31, 43
- Van Valkenburg, S.D., *see* Esser, S.C.
- Vetter, H., 41
- Villareal, T.A., *see* Fryxell, G.A.
- Votadinium: calvum*, 93; *spinosum*, 92
- Vozzhennikova, T.F., 126
- Walker, L.M., 101, 111
- Wall, D., 62, 70, 73, 76, 79, 86, 88, 92, 93, 95, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 112, 116, 117, 118, 119, 123, 124, 125, 127, 128; *see also* Anderson, D.M.
- Wassermann, A., *see* Mongar, I.L.
- water loss, 1
- Westella*, 6
- Whitton, B.A., *see* Carr, N.G.
- Williams, D.B., 123, 124
- Williams, G.L., 70, 82, 102, 116, 126; *see also* Evitt, W.R.; Lentini, J.K.
- Williams, J., *see* Steidinger, K.A.
- Williams, L.R., *see* Taylor, W.D.
- Wolk, C.P., *viii*
- Woloszynskia: apiculata*, 93, 110, 111; *tylota*, 86, 93, 97
- Wujek, D.E., 26
- Wynne, M.J., *see* Bold, H.C.
- Xanthidium*, 71; *bystrix*, 71
- Yentsch, C.M., 97, 105, 106, 107; *see also* Dale, B.; Lewis, C.M.
- Yentsch, C.S., *see* Yentsch, C.M.
- Zanthidium*, 71
- Zederbauer, E., 108
- Zigler, J.S., *see* Goosey, J.D.
- Zingmark, R.G., 109
- Zygnuma*, 1, 3
- zygotes, 77, 110