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The culture collection of algae at the Botanical Institute of the University at Innsbruck (Austria)

von

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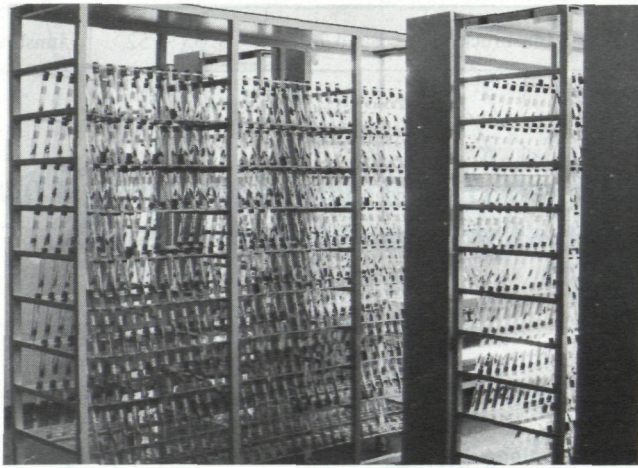
Die Sammlung der Algenkulturen des Institutes für Botanik der Universität Innsbruck (Österreich)

Synopsis: Aus der rund 1600 Stämme umfassenden Algensammlung am Institut für Botanik der Universität Innsbruck sind 324 Isolate (213 Arten aus 75 Gattungen) in einer alphabetischen Liste zusammengestellt. Zusätzliche Hinweise über den Isolator, die Herkunft und Ökologie der Kultur sowie Identität mit Sippen in anderen Kultursammlungen ergänzen die Liste. Die Algensammlung in Innsbruck ist auf die Kultur von Boden-, Luft- und Flechtenalgen spezialisiert. Sämtliche Stämme stehen ausschließlich für wissenschaftliche Zwecke zur Verfügung.

Interest in the study of algae has continued within the last decades, and a great variety of disciplines (e.g. physiology and especially taxonomy) is using algae as research material. The need for defined material has led to some important collections of algae around the world, many of them listed in the World Directory of Collections of Cultures of Microorganisms (Mc GOWAN & SKERMAN, 1982), where the collection of Innsbruck can be found under the acronym IBSG-505.

The first European collection was founded by E.G. PRINGSHEIM and his collaborators V. CZURDA and F. MAINX in the 1920's at the University of Prague. A part of PRINGSHEIM's cultures became the base for the collection at Cambridge (see ASHER & SPALDING, 1982) and later on, with PRINGSHEIM's return to Germany for the collection of the University of Göttingen (SAG-collection, see SCHLÖSSER, 1982, 1984). A stock of PRINGSHEIM's cultures provided also the beginning of the collection of algae at the University of Indiana, Bloomington, USA; this collection was moved to Austin, Texas and is known as UTEX-collection (see STARR, 1978). Isolates of soil - algae from alpine areas, cultivated by H. PITSCHMANN and H. REISIGL since 1960, founded the stock of the collection of algae at Innsbruck. The methods of isolation and cultivation of algae used by Wilhelm VISCHER, Basel, Switzerland, were transferred to Innsbruck by H. PITSCHMANN before 1960, and used for further studies in alpine soil algae until now. In 1975, the collection of algae at Basel with many type material of VISCHER was transferred to Innsbruck and is still a main part of the collection there.

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1



2



3

Fig. 1: Cultivation room, storage of about 3200 cultures of algae in agar tubes in separated, moveable racks.

Fig. 2: Front of one of the racks.

Fig. 3: Shelves for keeping the tubes are made of acryl-glass to enable the light diffusing through the whole rack.

(Photos made by S. Tatzreiter, Institute of Botany, Innsbruck, 1985)

The culture collection of algae at Innsbruck is specializing on the cultivation of soil-, airborne- and lichen-algae and contains now about 1600 strains, only 324 are listed here. All cultures are unialgal, but some of them contain bacteria. The strains are cultivated on BBM-agar (BISCHOFF & BOLD, 1963) and maintained under standard conditions (1200 lux on a diurnal light cycle of 12 hours light and 12 hours darkness at 13°C). All strains are available for research purpose, they are distributed in tube cultures on agar-medium. The storage of the agar-tubes in the cultivation room can be seen on fig. 1, 2 and 3.

Explanatory notes to the list of the strains: in contrast to the arrangement in an earlier catalogue (GÄRTNER, 1976), the genera and species are listed in alphabetical order. The strain number assigned to every isolate remains the same, regardless of any change in the nomenclature of the strain. Some names have been changed according to generally acceptance by the scientific community, the synonymy can be found within the informations given for each strain. Other available data for each isolate refer to name of isolator, date of isolation, ecology, geography and identity with strains in other collections. Strains described as "type material" were directly derived from the material from which the original description was made. Publications with reference to the isolated strains are cited with numbers in parentheses.

Abbreviations of collections:

- CCAP = Culture Centre of Algae and Protozoa, Institute of Terrestrial Ecology, 36 Storey's Way, Cambridge CB3 0DT, England;
UTEX = Culture Collection of Algae, Department of Botany, The University of Texas at Austin, Austin, Texas 78712, USA;
ATCC = American Type Culture Collection, 12301 Parklawn Drive, Rockville, Maryland 20852, USA;
SAG = Sammlung von Algenkulturen, Pflanzenphysiologisches Institut der Universität Göttingen, Nikolausberger Weg 18, D-3400 Göttingen, FRG.

List of Cultures

Actinochloris Koršikov

Actinochloris terrestris (Vischer) Ettl & Gärtner

- BS 321 W. VISCHER, 1945, soil, Unterengadin (Switzerland); type material; formerly *Asterococcus terrestris* Vischer; = *Radiosphaera dissecta* (Korš.) Starr in UTEX 460, = CCAP 3/2 b = SAG 247 - 1b; (43)

Anabaena Bory de St. Vincent

Anabaena cf. *variabilis* Kütz.

- S 317 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Apatococcus Brand

Apatococcus lobatus (Chod.) Petersen emend. Vischer

- G 177 G. GÄRTNER, 1974, bark, Innsbruck (Austria)
S 183 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
V 216 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Borodinellopsis Dykstra

Borodinellopsis texensis Dykstra

- IB 367 R.F. DYKSTRA, 1971, soil, Mustang Island, Texas (USA); type material; = UTEX 1593; (14)

Botrydiopsis Borzi

Botrydiopsis callosa Trenkwalder

- T 12 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); type material; (32, 33)
V 182 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
V 183 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); = SAG 30.83

Botrydiopsis intercedens Pascher

- BS 171 E.G. PRINGSHEIM; = UTEX 296 = SAG 806-3

Botrydiopsis pyrenoidosa Trenkwalder

- T 11 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); type material; = SAG 31.83; (32, 33)

Botrydiopsis sp.

- V 184 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 2

Bracteacoccus Tereg

Bracteacoccus cinnabarinus (Kol & Chod.) Starr

- BS 162 F. CHODAT, 1934, soil, Engadin (Switzerland); type material; formerly *Dictyococcus cinnabarinus* (Kol & Chod.) Vischer; = CCAP 221/2 = UTEX 56; (21, 40)

Bracteacoccus engadinensis (Kol & Chod.) Starr

- BS 164 F. CHODAT, 1934, soil, Engadin (Switzerland); type material; formerly *Dictyococcus engadinensis*; = CCAP 221/3 = SAG 221-3; (21, 40)

Bracteacoccus giganteus Bischoff & Bold

- V 87 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
T 64 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Bracteacoccus grandis Bischoff & Bold

- S 39 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Bracteacoccus minor (Chod.) Petrova

- S 15 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
V 85 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Bracteacoccus cf. *pseudominor* Bischoff & Bold

- T 65 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Bracteacoccus terrestris (Kol & Chod.) Starr

- BS 163 F. CHODAT, 1934, soil, Engadin (Switzerland); type material; formerly *Dictyococcus terrestris* (Kol & Chod.) Vischer; = CCAP 221/4 = UTEX 58 = SAG 221-4; (21, 40)

Bumilleriopsis Printz

Bumilleriopsis filiformis Vischer

- BS 360 W. VISCHER, 1943, soil, Engadin (Switzerland); type material; = UTEX 309 = CCAP 809/2 = SAG 809-2; (42)

Calothrix Agardh

Calothrix crustacea Schousboe & Thuret s.l.

- S 318 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
S 319 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Calothrix parietina (Nägeli) Thuret

- V 161 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Cedercreutziiella Vischer

Cedercreutziiella savoniensis Vischer

- BS 591 W. VISCHER, 1950, wall, Savonlinna (Finland); type material; (46)

Chlamydomonas Ehrenberg

Chlamydomonas applanata Pringsheim

- T 40 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); = SAG 12.84

- Chlamydomonas chlorococcoides* Ettl & Schwarz
 IB 390 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); type material; = SAG 15.82; (16)
- Chlamydomonas concinna* Gerloff
 S 73 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); = SAG 16.82
- Chlamydomonas culleus* Ettl
 V 46 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
- Chlamydomonas gloeophila* Skuja
 S 78 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); = SAG 14.84
- Chlamydomonas lundii* Ettl H. & O.
 T 41 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)
- Chlamydomonas minutissima* Koršikov
 S 87 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
- Chlamydomonas moewusii* Gerloff
 BS 728 E. PRINGSHEIM ?"1954 from E. PRINGSHEIM, Göttingen" (Germany)
- Chlamydomonas mucicola* Schmidle
 S 103 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); = SAG 19.82
- Chlamydomonas perpusilla* Gerloff
 S 88 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
- Chlamydomonas peterfii* Gerloff
 V 50 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
- Chlamydomonas planoconvexa* Lund
 T 37 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); = SAG 18.82
- Chlamydomonas proboscigera* Korš. in Pascher
 G 222 G. GÄRTNER, 1974, soil, Hoggar desert, Sahara (Algeria); formerly *Chlamydomonas spbaeroides* Gerloff; = SAG 4.83
- Chlamydomonas rapa* Ettl
 S 97 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Chlorella Beijerinck

- Chlorella* cf. *homosphaera* Skuja
 S 58 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
 T 84 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)
- Chlorella* cf. *protothecoides* Krüger
 T 83 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)
- Chlorella saccharophila* (Krüger.) Mig.
 V 37 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
 T 82 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); formerly *Chlorella saccharophila* var. *saccharophila* Fott & Novák.
- Chlorella ellipsoidea* Gern.
 G 100 G. GÄRTNER, 1974, bark, Innsbruck (Austria); formerly *Chlorella saccharophila* var. *ellipsoidea* (Gern.) Fott & Novák.
 T 81 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); formerly *Chlorella saccharophila* var. *ellipsoidea* (Gern.) Fott & Novák.
- Chlorella vulgaris* Beijer.
 S 51 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
 T 79 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 1
 T 80 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 2
 V 17 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 1
 V 22 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 2
 V 28 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 3

Chlorellidium Vischer & Pascher

- Chlorellidium tetrabotrys* Vischer & Pascher
 S 153 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

- S 154 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
V 185 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Chlorhormidium Fott

Chlorhormidium dissectum (A. Braun) Fott

- V 103 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Chloridella Pascher

Chloridella neglecta (Pascher & Geitler) Pascher

- BS 216 W. VISCHER, 1940, soil, Unterengadin (Switzerland); = CCAP 813/1 = UTEX 431 = SAG 813-1b

Chlorocloster Pascher

Chlorocloster engadinensis Vischer

- BS 252 W. VISCHER, 1940, soil, Unterengadin (Switzerland); type material; = CCAP 812/1 = UTEX 307 = SAG 812-1; (42)

Chlorococcum Meneghini

Chlorococcum chlorococcoides (Korš.) Philipose

- T 48 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); formerly *Hypnomonas chlorococcoides* Korš.

- V 48 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); formerly *Hypnomonas chlorococcoides* Korš.

Chlorococcum cf. *echinozygotum* Starr

- T 51 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Chlorococcum korschikoffii Ettl & Gärtner

- S 215 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); formerly *Hypnomonas ellipsoidea* Korš.

Chlorococcum minutum Starr

- T 50 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Chlorococcum cf. *perforatum* Arce & Bold

- V 170 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Chlorococcum scabellum Deason & Bold

- S 219 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

- S 220 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

- S 221 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

- S 222 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Chlorococcum schwarzi Ettl & Gärtner

- S 214 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); form 2; formerly *Hypnomonas schizochlamys* (Korš.) Philipose sensu Schwarz

- T 47 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); formerly *Hypnomonas schizochlamys* (Korš.) Philipose sensu Schwarz

Chlorokybus Geitler

Chlorokybus atmophyticus Geitler

- T 106 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

- V 202 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Chloromonas Gobi emend. Wille

Chloromonas rosae (Ettl H. & O.) Ettl

- T 46 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

- V 204 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Chlorosarcina Gerneck emend. Vischer

Chlorosarcina brevispinosa Chant. & Bold

- S 166 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Chlorosarcina stigmatica Deason

- S 163 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
T 105 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Chlorosarcinopsis Herndon

Chlorosarcinopsis cf. *gelatinosa* Chant. & Bold

- V 211 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Chlorosarcinopsis minor (Gerneck) Herndon

- T 104 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Coccobotrys Chodat

Coccobotrys verrucariae Chod. emend. Vischer

- BS 175 R. CHODAT, 1913, lichen phycobiont (*Verrucaria*); type material; (46)

Coccomyxa Schmidle

Coccomyxa cf. *confluens* (Kütz.) Fott

- V 16 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); formerly *Coccomyxa* cf. *dispar* Schmidle

Coccomyxa sp.

- T 90 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 1
T 91 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 2
T 92 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 3
V 7 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 1
V 9 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 2
V 11 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 3

Coelastrella Chodat

Coelastrella striolata var. *multistriata* (Trenkw.) Kalina & Punčoch.

- T 88 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); type material; formerly *Scotiella multistriata* Trenkwalder; (32, 33)

Coelastrum Nägeli

Coelastrum proboscideum var. *dilatatum* Vischer

- BS 13 W. VISCHER, 1924, water pond, Neudorf (Switzerland); type material; = CCAP 217/2 = UTEX 282 = SAG 217-2

Coelastrum proboscideum var. *gracile* Vischer

- BS 15 W. VISCHER, 1924, water pond, Neudorf (Switzerland); type material; = CCAP 217/3 = UTEX 184 = SAG 217-3

Cosmarium Corda

Cosmarium anceps Lund

- V 230 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
V 231 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Cosmarium curtum (Bréb.) Ralfs

- T 111 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Cosmarium decedens (Reinsch) Racib.

- T 110 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Cosmarium bolmiense Lund

- V 232 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Cylindrocystis Meneghini

Cylindrocystis brebissonii (Menegh.) de Bary

- V 233 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Cylindrocystis brebissonii var. *minor* West & West

- V 234 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Deasonia Ettl & Komárek

Deasonia bispora (Deason) Ettl & Komárek

IB 381 HOFSTETTER, 1976, soil, Memphis (USA); type material; formerly *Neosporangiococcum bisporum* Deason; = UTEX 2115; (10, 15)

Deasonia cohaerens (Deason) Ettl & Komárek

IB 382 T.R. DEASON, 1971, soil, Memphis (USA); type material; formerly *Neosporangiococcum cohaerens* Deason; = UTEX 1842; (9, 15)

Deasonia gigantea (Deason) Ettl & Komárek

IB 383 T.R. DEASON, 1971, soil, Memphis (USA); type material; formerly *Neosporangiococcum giganteum* Deason; = UTEX 1845; (9, 15)

Deasonia granata (Starr) Ettl & Komárek

IB 384 E.G. PRINGSHEIM, before 1928, soil near Prag (Czechoslovakia); type material; formerly *Chlorococcum multinucleatum* Starr = *Neosporangiococcum granatum* (Starr) Deason; = CCAP 213/1a = UTEX 116 = SAG 213-1a; (9, 15, 30)

Deasonia irregularis (Deason) Ettl & Komárek

IB 385 HOFSTETTER, 1966, Memphis (USA); type material; formerly *Neosporangiococcum irregulare* Deason; = UTEX 2118; (10, 15)

Deasonia multinucleata (Deason & Bold) Ettl & Komárek

IB 386 T.R. DEASON, soil, Texas (USA); type material; formerly *Neosporangiococcum multinucleatum* (Deason & Bold) Deason; = UTEX 976; (9, 11, 15)

Deasonia ovata (Deason) Ettl & Komárek

IB 387 T.R. DEASON, 1971, soil, Memphis (USA); type material; formerly *Neosporangiococcum ovatum* Deason; = UTEX 1844; (9, 15)

Deasonia prolifera (Deason) Ettl & Komárek

IB 278 T.R. DEASON, 1971, soil, Memphis (USA); type material; formerly *Neosporangiococcum proliferum* Deason; = UTEX 1846; (9, 15)

Deasonia punctata (Arce & Bold) Ettl & Komárek

IB 388 G. ARCE, 1958, soil, Kuba; type material; formerly *Chlorococcum punctatum* Arce & Bold = *Neosporangiococcum punctatum* (Arce & Bold) Deason; = UTEX 786; (2, 9, 15)

Deasonia saccata (Deason) Ettl & Komárek

IB 276 T.R. DEASON, 1971, soil, Memphis (USA); type material; formerly *Neosporangiococcum saccatum* Deason; = UTEX 1843; (9, 15)

Deasonia variabilis (Deason) Ettl & Komárek

IB 389 HOFSTETTER, 1976, soil, Memphis (USA); type material; formerly *Neosporangiococcum variabile* Deason; = UTEX 2122; (10)

Desmococcus Brand

Desmococcus vulgaris (Näg.) Brand emend. Geitler & Vischer

S 197 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Dictyochloris Vischer ex Starr

Dictyochloris fragrans Vischer

T 69 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

V 179 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Dictyochloris sp.

T 71 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Dictyochloropsis Geitler

Dictyochloropsis splendida Geitler

T 72 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Diplosphaera Bialosuknia emend. Vischer

Diplosphaera chodatii (Bialosuknia) Vischer

S 184 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

V 219 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Diplosphaera sp.

- V 221 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
T 108 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Eustigmatos Hibberd

Eustigmatos vischeri Hibberd

- BS 241 W. VISCHER, 1945, soil, Unterengadin (Switzerland); formerly *Pleurochloris commutata* Pascher; = CCAP 860/1 = UTEX 310; (19, 42)

Eustigmatos magnum (Petersen) Hibberd (19)

- S 1 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); formerly *Pleurochloris magna* Petersen
S 2 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); formerly *Pleurochloris magna* Petersen
T 8 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); formerly *Pleurochloris magna* Petersen
V 1 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); formerly *Pleurochloris magna* Petersen
V 2 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); formerly *Pleurochloris magna* Petersen

Eustigmatos polyphem (Pitschmann) Hibberd

- IB 207 H. PITSCHMANN, 1969, soil, Mt. Kenya (Kenya); type material; formerly *Pleurochloris polyphem* Pitschmann; (19, 24)
IB 208 H. PITSCHMANN, 1969, soil, Mt. Kenya (Kenya); type material; formerly *Pleurochloris polyphem* Pitschmann; (19, 24)

Excentrochloris Pascher

Excentrochloris sp.

- V 189 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Haematococcus C.A. Agardh emend. Flotow

Haematococcus pluvialis Flotow emend. Wille

- BS 2 W. VISCHER, 1923, water reservoir, Basel (Switzerland)

Heterococcus Chodat

Heterococcus brevicellularis Vischer

- BS 351 W. VISCHER, 1943, soil, Unterengadin (Switzerland); type material; = CCAP 835/1 = UTEX 154 = SAG 835-1; (42)
S 267 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Heterococcus caespitosus Vischer

- BS 116 W. VISCHER, 1934, soil, Schmieheim, Freiburg (Germany); type material; = CCAP 235/2a = UTEX 313 = SAG 835-2a; (40)
S 271 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Heterococcus chodatii Vischer

- BS 161 R. CHODAT, 1908, Lake Genève; type material; = CCAP 835/3 = UTEX 346 = SAG 835-3; (40)

Heterococcus mariatanii Vischer

- BS 167 W. VISCHER, 1936, spring, Montana, Wallis (Switzerland); type material; = CCAP 835/7 = UTEX 350 = SAG 835-7; (41)

Heterococcus vesiculosus Pitschmann

- V 111 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Heterotetracystis Cox & Deason

Heterotetracystis intermedia Cox & Deason

- IB 277 E.R. COX, 1968, soil, Cedars of Lebanon State Forest, Tennessee (USA); type material; = UTEX 1673; (7)

Heterothrix Pascher

Heterothrix hormidioides Vischer

BS 358 W. VISCHER, 1945, soil, Unterengadin (Switzerland); type material; = CCAP 836/2 = UTEX 353; (42)

Heterothrix sessilis Vinatzer

V 98 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; (35, 36)

Hormidiospora Vinatzer

Hormidiospora verrucosa Vinatzer

V 199 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; (35, 36)

Interfilum Chodat & Topali

Interfilum paradoxum Chodat & Topali

T 98 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Klebsormidium Silva, Mattox & Blackwell

Klebsormidium flaccidum (Kütz.) Silva, Mattox & Blackwell

V 100 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); formerly *Chlorbormidium flaccidum* (A. Braun) Fott

T 94 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 1; formerly *Chlorbormidium flaccidum* (A. Braun) Fott

T 95 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 2; formerly *Chlorbormidium flaccidum* (A. Braun) Fott

T 96 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 3; formerly *Chlorbormidium flaccidum* (A. Braun) Fott

T 97 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); form 4; formerly *Chlorbormidium flaccidum* (A. Braun) Fott

Klebsormidium marinum (Deason) Silva, Mattox & Blackwell

S 206 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); formerly *Chlorbormidium marinum* Deason

Leptosira Borzi

Leptosira obovata Vischer

BS 46 W. VISCHER, 1928 ?, swamp-water, Rosenau, Basel (Switzerland); type material; = CCAP 445/1 = UTEX 319 = SAG 445-1; (39)

Lobococcus Reisingl

Lobococcus incisus Reisingl

IB 83 H. REISIGL, 1964, soil, Ötztaler Alps, Tyrol (Austria); type material; formerly *Myrmecia incisa* Reisingl; (25)

Lobosphaera Reisingl

Lobosphaera tirolensis Reisingl

S 234 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Macrochloris Koršikov

Macrochloris cobaerens (Vinatzer) Ettl & Gärtner

V 176 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; formerly *Chlorozebra cobaerens* Vinatzer; (35, 36)

V 177 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; formerly *Chlorozebra cobaerens* Vinatzer; (35, 36)

Macrochloris multinucleata (Reisingl) Ettl & Gärtner

IB 1 H. REISIGL, 1969, soil, Cho Oyu, Himalaya (Nepal); type material; formerly *Chlorozebra multinucleata* Reisingl; (26)

IB 3 H. REISIGL, 1969, soil, Cho Oyu, Himalaya (Nepal); type material; formerly *Chlorozebra multinucleata* Reisingl; (26)

Microcoleus Desmazières

Microcoleus vaginatus (Vaucher) Gomont

- V 155 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
V 156 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Monodus Chodat

Monodus unipapilla Reisigl

- IB 63 H. REISIGL, 1964, soil, Ötztaler Alps, Tyrol (Austria); type material; (25)

Muriella Boye - Petersen

Muriella aurantiaca Vischer

- BS 108 W. VISCHER, 1933, tuff stone, Basel (Switzerland); type material; = CCAP 249/1 = ATCC 30413 = UTEX 36 = SAG 249-1; (40)

Muriella decolor Vischer

- BS 29 W. VISCHER, 1926, swamp water, Rosenau (Switzerland); type material; = CCAP 249/2 = UTEX 126 = SAG 249-2; (40)
T 86 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)
V 38 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Myrmecia Printz

Myrmecia astigmatica Vinatzer

- V 73 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; (35, 36)
V 74 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
V 75 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
T 76 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Myrmecia biatoremellae (Tschermak-Weoess & Plessl) Petersen

- V 76 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
S 179 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
T 73 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Myrmecia bisecta Reisigl

- T 74 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)
V 68 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 2

Neochloris Starr

Neochloris bilobata Vinatzer

- V 141 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; (35, 36)
V 143 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 1 with smaller cells
T 58 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Neochloris pseudoalveolaris Deason & Bold

- T 57 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Neochloris sp.

- V 149 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Neosporangiococcum Deason

Neosporangiococcum alabamense (Deason) Deason

- IB 368 T.R. DEASON, 1959, soil, Alabama (USA); type material; formerly *Sporangiococcum alabamense* Deason; = UTEX 960; (8, 10, 13)

Neosporangiococcum butyrosum Deason & Cox

- IB 369 T.R. DEASON & E.R. COX, 1964, soil, Alabama (USA); type material; = UTEX 1840; (12)

Neosporangiococcum commatiforme Deason

- IB 370 HOFSTETTER, 1966, soil, Memphis (USA); type material; = UTEX 2116; (10)

Neosporangiococcum concentricum (Anderson & Nichols) Deason

- IB 371 NICHOLS, 1964, limestone spring (USA); type material; formerly *Sporangiococcum concentricum* Anderson & Nichols; = UTEX 1646; (10)

Neosporangiococcum excentricum (Deason & Bold) Deason & Cox

IB 372 T.R. DEASON & H.C. BOLD, 1957, water from an aquarium, Iowa (USA); type material; formerly *Sporangiococcum excentricum* Deason & Bold; = UTEX 1232; (11, 12)

Neosporangiococcum longisporum Deason

IB 373 HOFSTETTER, 1966, soil, Memphis (USA); type material; = UTEX 2121; (10)

Neosporangiococcum macropyrenoidosum Deason & Cox

IB 280 T.R. DEASON & E.R. COX, 1964, soil, Tennessee (USA); type material; = UTEX 1839; (12)

Neosporangiococcum mahleri Deason

IB 374 MAHLER, 1963, soil, Austin (USA); type material; = UTEX 2119; (10)

Neosporangiococcum mobile Deason & Cox

IB 375 T.R. DEASON & E.R. COX, 1964, soil, Alabama (USA); type material; = UTEX 1841; (12)

Neosporangiococcum perforatum Deason & Cox

IB 376 T.R. DEASON & E.R. COX, 1962, soil, Alabama (USA); type material; = UTEX 1837; (12)

Neosporangiococcum polymorphum (Anderson & Nichols) Deason

IB 377 NICHOLS, 1964, limestone spring (USA); type material; formerly *Sporangiococcum polymorphum* Anderson & Nichols; = UTEX 1647; (10)

Neosporangiococcum rugosum Deason

IB 378 HOFSTETTER, 1967, soil, Memphis (USA); type material; = UTEX 2120

Neosporangiococcum sphaericum Deason

IB 379 HOFSTETTER, 1967, soil, Memphis (USA); type material; = UTEX 2117; (10)

Neosporangiococcum solitarium Deason

IB 380 HOFSTETTER, 1967, soil, Memphis (USA); type material; = UTEX 2114; (10)

Neosporangiococcum vacuolatum Deason & Cox

IB 281 T.R. DEASON & E.R. COX, 1964, soil, Tennessee (USA); type material; = UTEX 1838; (12)

Nephrodiella Pascher

Nephrodiella brevis Vischer

BS 319 W. VISCHER, 1941, soil, Unterengadin (Switzerland); type material; = CCAP 850/1 = UTEX 152 = ATCC 30440 = SAG 850-1; (42)

Nostoc Vaucher

Nostoc commune Vaucher

V 157 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 1

V 158 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 2

V 159 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); form 3

G 182 G. GÄRTNER, 1974, bark, Innsbruck (Austria)

S 322 K. SCHWARZ, 1975, soil, Isle of Lavsa (Yugoslavia)

S 323 K. SCHWARZ, 1975, soil, Isle of Lavsa (Yugoslavia)

S 324 K. SCHWARZ, 1975, soil, Isle of Lavsa (Yugoslavia)

S 325 K. SCHWARZ, 1975, soil, Isle of Lavsa (Yugoslavia)

S 326 K. SCHWARZ, 1975, soil, Isle of Lavsa (Yugoslavia)

Nostoc cf. *ellipsosporum* (Desmazière) Bornet & Flahault

S 321 K. SCHWARZ, 1975, soil, Isle of Lavsa (Yugoslavia)

Nostoc cf. *muscorum* Agardh

S 320 K. SCHWARZ, 1975, soil, Isle of Lavsa (Yugoslavia)

G 197 G. GÄRTNER, 1974, bark, Innsbruck (Austria)

Nostoc cf. *punctiforme* (Kütz.) Hariot

T 3 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Nostoc cf. *verrucosum* Vaucher

T 4 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Nostoc sp.

- T 5 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)
BS 297 W. VISCHER, 1941, soil, Switzerland
BS 363 W. VISCHER, 1943, soil, Switzerland

Oscillatoria Vaucher

Oscillatoria sp.

- BS 594 W. VISCHER, 1950, Finland

Ourococcus Grobety

Ourococcus bicaudatus Grobety

- T 89 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Penium de Brébisson

Penium cf. *silvae nigrae* Rabanus

- T 112 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Planophila Gerneck

Planophila laetevirens Gerneck

- V 191 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Plectonema Thuret ex Gomont

Plectonema battersii Gomont

- S 334 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
S 335 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
S 336 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Plectonema sp.

- T 2 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Pleurochloris Pascher

Pleurochloris meiringensis Vischer

- S 200 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)
T 9 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)
V 6 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Prasiolopsis Vischer

Prasiolopsis ramosa Vischer

- BS 456 W. VISCHER, 1953, bark, Basel (Switzerland); type material; = SAG 26.83; (44)

Pseudendoconiopsis Vischer

Pseudendoconiopsis botryoides Vischer

- T 107 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Pseudendoconium Wille

Pseudendoconium cf. *basiliense* Vischer

- V 209 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Pseudochlorella Lund

Pseudochlorella aquatica Vischer

- BS 39 W. VISCHER, 1955, water pond, Basel (Switzerland); type material; formerly *Jaagia aquatica* Vischer; (45)

Pseudochlorella pyrenoidosa (Zeitler) Lund

- V 212 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Pseudochlorella sp.

- V 214 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
T 85 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Pseudococcomyxa Koršikov

Pseudococcomyxa cf. *simplex* (Mainx) Fott

- S 46 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); formerly *Coccomyxa* cf. *simplex* Mainx)

Pseudopleurococcus Snow emend. Vischer

Pseudopleurococcus arthopyreniae Vischer & Klement

- BS 654 O. KLEMENT, 1952, phycobiont of *Arthopyrenia kelpii*; type material; (44)

Pseudotrochiscia Vinatzer

Pseudotrochiscia areolata Vinatzer

- V 207 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; (35, 36)

Raphidonema Lagerheim

Raphidonema longiseta Vischer

- BS 97 W. VISCHER, 1933, pond, Botanical Garden Basel (Switzerland); type material; = CCAP 470/1a = UTEX 339 = SAG 470-1; (39)

Scenedesmus Meyen

Scenedesmus obtusiusculus Chod.

- BS 8 W. VISCHER, 1923, small pond, Basel, Switzerland, formerly *S. basiliensis*; = UTEX 83 (as Vischer 1) = CCAP 276/1a = SAG 276-1 = ATCC 30434; (37)

Schizothrix Kützing

Schizothrix calcicola (Agardh) Gomont

- V 150 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
S 329 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); form 1
S 330 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); form 1
S 332 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); form 2
S 333 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia); form 2

Schizothrix cf. *beufleri* Grun.

- V 151 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Schizothrix sp.

- V 152 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Scotiellopsis Vinatzer

Scotiellopsis rubescens Vinatzer

- V 195 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; (35, 36)

Scotiellopsis terrestris (Reisigl) Punčoch. & Kalina

- T 87 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy); formerly *Scotiella terrestris* Reisigl

Spongiochloris Starr

Spongiochloris spongiosa (Vischer) Starr

- BS 318 W. VISCHER, 1942, soil, Unterengadin (Switzerland); type material; formerly *Astero-coccus spongiosus* Vischer; = CCAP 3/1 = UTEX 1; (43)

- T 60 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Spongiochloris excentrica Starr

- S 146 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Spongiochloris sp.

- T 61 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

- S 143 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Stichococcus Nägeli

Stichococcus allas Reisigl

- IB 37 H. REISIGL, 1964, soil, Ötztal valley (Austria); type material; (25)

Stichococcus bacillaris Nägeli

- BS 1 W. VISCHER, 1923, water reservoir, Basel (Switzerland); = CCAP 379/1b = UTEX 314 = SAG 379-1b
BS 110 W. VISCHER, 1933, soil, Basel (Switzerland)
BS 331 W. VISCHER, 1942, soil, Unterengadin (Switzerland)
G 42 G. GÄRTNER, 1974, bark, Innsbruck (Austria)
V 162 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
S 202 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia), form 1
S 204 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia), form 2
T 100 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy), form 1
T 101 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy), form 2
T 102 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy), form 3

Stichococcus minutus Grintzesco & Peterfi

- G 145 G. GÄRTNER, 1974, bark, Innsbruck (Austria)

Stichococcus undulatus Vinatzer

- V 164 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; (35, 36)
G 140 G. GÄRTNER, 1974, bark, Innsbruck (Austria)
T 103 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Tetracystis Brown & Bold

Tetracystis aeria Brown & Bold

- IB 322 R.M. BROWN, 1960, strain 1, air, Pampa, Texas (USA); type material; = UTEX 1452 = CCAP 181/1a = SAG 89.80; (6)

Tetracystis aggregata Brown & Bold

- IB 321 R.M. BROWN, 1960, No. Pc-1, air, Austin, Texas (USA); type material; = UTEX 1454 = CCAP 181/2 = SAG 90.80; (6)
V 165 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)
T 54 H. TRENKWALDER, soil, pine forest, Brixen, South Tyrol (Italy)

Tetracystis aplanospora (Arce & Bold) Brown & Bold

- IB 320 G. ARCE, No. 64, soil, Havana (Cuba); type material; formerly *Chlorococcum aplanosporum* Arce & Bold; = UTEX 773 = CCAP 181/9 = SAG 91.80; (2, 6)

Tetracystis dissociata Brown & Bold

- IB 319 W. VISCHER, 1941, No. 304, soil, Engadin (Switzerland); type material; formerly *Borodinella* sp.; = UTEX 128 = ATCC 30438 = CCAP 207/1b = SAG 207-1; (6)

Tetracystis excentrica Brown & Bold

- IB 318 R.M. BROWN, 1961, soil, Colorado (USA); type material; = UTEX 1456 = CCAP 181/3 = SAG 92.80; (6)

Tetracystis illinoisensis Brown & Bold

- IB 317 R.M. BROWN, 1962, No. R-3-3, air, Illinois (USA); type material; = UTEX 1457 = CCAP 181/4 = SAG 93.80; (6)

Tetracystis intermedia (Deason & Bold) Brown & Bold

- IB 314 T.R. DEASON, No. C-1-13, soil, Texas (USA); type material; formerly *Chlorococcum intermedium* Deason & Bold; = UTEX 974 = CCAP 181/10 = SAG 94.80; (6, 11)
T 55 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Tetracystis isobilateralis Brown & Bold

- IB 315 R.M. BROWN, 1960, No. A-6-2-3, soil, Texas (USA); type material; = UTEX 1459 = CCAP 181/5 = SAG 95.80; (6)

Tetracystis pampae Brown & Bold

- IB 316 R.M. BROWN, 1961, soil, Texas (USA); type material; = UTEX 1460 = CCAP 181/6 = SAG 96.80; (6)

Tetracystis tetraspora (Arce & Bold) Brown & Bold

- IB 324 G. ARCE, No. 59 A, soil, Havana (Cuba); type material; formerly *Chlorococcum tetrasporum* Arce & Bold; = UTEX 780 = CCAP 181/11 = SAG 98.80; (2, 6)

Tetracystis cf. *tetraspora* Brown & Bold

- V 168 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Tetracystis texensis Brown & Bold

IB 323 K. MATTOX, 1961, No. Mx-2-c, soil, Texas (USA); type material; = UTEX 1463 = CCAP 181/8 = SAG 99.80; (6)

S 229 K. SCHWARZ, 1975, soil, Isle of Lavsja (Yugoslavia)

Tetracystis sp.

T 56 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

V 169 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Tolypothrix Kützing

Tolypothrix cf. *byssoidea* (Hass.) Kirchn.

T 1 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Tolypothrix sp.

V 160 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy)

Trebouxia Puymaly

Trebouxia aggregata (Archibald) Gärtner

IB 325 A. QUISPTEL, 1943, from *Xanthoria* sp., Delft (Netherlands); type material; formerly *Pseudotrebourgia aggregata* Archibald; = UTEX 180 = CCAP 219/1d = SAG 219-1d; (3, 18)

Trebouxia anticipata Ahmadjian ex Archibald

IB 340 V. AHMADJIAN, No. 1, from *Parmelia rudecta* (USA); type material; = UTEX 903 = CCAP 219/3; (3, 18)

IB 341 V. AHMADJIAN, No. 2, from *Parmelia rudecta* (USA); type material; = UTEX 904; (3, 18)

Trebouxia arboricola Puymaly

IB 363 from Culture Collection Delft (Netherlands); type material; formerly *Cystococcus humicola* Nägeli sensu Treboux; = CCAP 219/1a = SAG 219-1a

Trebouxia corticola (Archibald) Gärtner

IB 326 V. AHMADJIAN, 1959, bark (USA); type material; formerly *Pseudotrebourgia corticola* Arch.; = UTEX 909; (3, 18)

Trebouxia crenulata Archibald

IB 359 RICHARDSON, 1965, from *Xanthoria aureola* (England); type material; = CCAP 219/2; (3)

Trebouxia decolorans Ahmadjian

IB 327 V. AHMADJIAN, from *Xanthoria parietina* (USA); type material; = UTEX 901; (1, 3)

Trebouxia erici Ahmadjian

IB 342 V. AHMADJIAN, 1960, No. 4, from *Cladonia cristatella* (USA); type material; = UTEX 910; (1)

IB 343 V. AHMADJIAN, 1960, No. 7, from *Cladonia cristatella* (USA); type material; = UTEX 911; (1)

IB 344 V. AHMADJIAN, 1960, No. 1, from *Cladonia cristatella* (USA); type material; = UTEX 912; (1)

IB 364 J. MEISCH, 1981, No. M 025, from *Cladonia grayii*, Innsbruck (Austria)

IB 365 J. MEISCH, 1981, No. M 027, from *Cladonia subulata* (Luxembourg)

Trebouxia excentrica Archibald

IB 345 HUTCHINSON, H 536, from *Stereocaulon dactylophyllum* var. *occidentale* (USA); type material; = UTEX 1714; (3)

Trebouxia flava Archibald

IB 346 A. QUISPTEL, from *Physcia pulverulenta* (Netherlands); type material; = UTEX 181 = CCAP 219/1c; (3)

Trebouxia galapagensis (Hildreth & Ahmadjian) Gärtner

IB 333 E. KEOGH, 1971, from *Ramalina* sp. (Galapagos Islands); type material; = UTEX 2230; (18, 20)

Trebouxia gelatinosa Ahmadjian ex Archibald

IB 347 V. AHMADJIAN, 1959, No. 2, from *Parmelia caperata* (USA); type material; = UTEX 905; (3)

- IB 348 V. AHMADJIAN, 1959, No. 3, from *Parmelia caperata* (USA); type material; = UTEX 906; (3)
- IB 366 J. MEISCH, 1981, No. M 035, from *Hypogymnia physodes*, Innsbruck (Austria)
- Trebouxia gigantea* (Hildreth & Ahmadjian) Gärtner
- IB 334 R.E. SHOWMAN, 1971, from *Caloplaca cerina*, Ohio (USA); type material; formerly *Pseudotrebourgia gigantea* Hildreth & Ahmadjian; = UTEX 2231; (18, 20)
- Trebouxia glomerata* (Warén) Ahmadjian
- IB 349 V. AHMADJIAN, 1960, No. 1, from *Stereocaulon evolutoides*, Princeton, Massachusetts (USA); type material; = UTEX 894; (1)
- IB 350 V. AHMADJIAN, 1960, No. 2, from *Stereocaulon evolutoides*, Princeton, Massachusetts (USA); type material; = UTEX 895; (1)
- IB 351 V. AHMADJIAN, 1960, No. 1, from *Stereocaulon pileatum*, Princeton, Massachusetts (USA); type material; = UTEX 896; (1)
- IB 352 V. AHMADJIAN, 1960, No. 8, from *Stereocaulon pileatum*, Princeton, Massachusetts (USA); type material; = UTEX 897; (1)
- Trebouxia bigginsiae* (Hildreth & Ahmadjian) Gärtner
- IB 335 E. KEOGH, 1971, from *Buellia straminea*, Bartolome (Galapagos Islands); type material; formerly *Pseudotrebourgia bigginsiae* Hildreth & Ahmadjian; = UTEX 2232; (18, 20)
- Trebouxia impressa* Ahmadjian
- IB 330 V. AHMADJIAN, 1960, from *Physcia stellaris* (USA); type material; formerly *Pseudotrebourgia impressa* (Ahmadjian) Archibald; = UTEX 892; (1, 3)
- IB 331 V. AHMADJIAN, 1960, from *Physcia stellaris* (USA); type material; formerly *Pseudotrebourgia impressa* (Ahmadjian) Archibald; = UTEX 893; (1, 3)
- Trebouxia incrustata* Ahmadjian ex Gärtner
- IB 329 V. AHMADJIAN, 1959, from *Lecanora dispersa* (USA); type material; formerly *Pseudotrebourgia incrustata* (Ahmadjian) Archibald; = UTEX 784; (3, 18)
- Trebouxia irregularis* Hildreth & Ahmadjian
- IB 339 V. AHMADJIAN, 1972, from *Stereocaulon* sp., Langa River (Iceland); type material; = UTEX 2236; (20)
- Trebouxia italiana* Archibald
- IB 358 TOMASALLI, from *Xanthoria parietina* (Italy); type material; formerly *Trebouxia decolorans* Ahmadjian; = CCAP 219/5b; (3)
- Trebouxia jamesii* (Hildreth & Ahmadjian) Gärtner
- IB 336 E. KEOGH, 1975, from *Schaereria tenebrosa*, Wales (England); type material; formerly *Pseudotrebourgia jamesii* Hildreth & Ahmadjian; = UTEX 2233; (18, 20)
- Trebouxia magna* Archibald
- IB 354 V. AHMADJIAN, No. 2, from *Pilophorus acicularis* (USA); type material; = UTEX 902; (3)
- Trebouxia potteri* Ahmadjian ex Gärtner
- IB 332 V. AHMADJIAN, from *Lecanora rubina* (USA); type material; formerly *Pseudotrebourgia potteri* (Ahmadjian) Archibald; = UTEX 900; (3, 18)
- Trebouxia pyriformis* Archibald
- IB 355 HUTCHINSON, from *Cladonia squamosa* (USA); type material; = UTEX 1712; (3)
- IB 356 HUTCHINSON, from *Stereocaulon pileatum* (USA); type material; = UTEX 1713; (3)
- Trebouxia showmanii* (Hildreth & Ahmadjian) Gärtner
- IB 337 E. SHOWMAN, 1971, from *Lecanora hagemii*, Ohio (USA); type material; formerly *Pseudotrebourgia showmanii* Hildreth & Ahmadjian; = UTEX 2234; (18, 20)
- Trebouxia simplex* Tschermak - Woess
- IB 361 E. TSCHERMAK-WOESS, 1976, from *Chaenotheca chrysocephala*, Tyrol (Austria); type material; = SAG 101.80; (34)
- Trebouxia usneae* (Hildreth & Ahmadjian) Gärtner
- IB 338 E. KEOGH, 1975, from *Usnea filipendula*, Maine (USA); type material; formerly *Pseudotrebourgia usneae* Hildreth & Ahmadjian; = UTEX 2235; (18, 20)

Trochiscia Kützing

Trochiscia sp.

S 236 K. SCHWARZ, 1975, soil, Isle of Lavsa (Jugoslavia)

Trochisciopsis Vinatzer

Trochisciopsis tetraspora Vinatzer

V 208 G. VINATZER, 1975, soil, Dolomites, South Tyrol (Italy); type material; (35, 36)

T 77 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Ulothrix Kützing

Ulothrix tenuissima Kütz.

T 93 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Vischeria Pascher

Vischeria helvetica (Vischer & Pascher) Hibberd

BS 170 R. CHODAT, Genf No. 255; formerly *Polyedriella helvetica* Vischer & Pascher; = CCAP 861/1 = UTEX 49 = ATCC 30425 = SAG 876-1; (19)

Vischeria punctata Vischer

BS 266 W. VISCHER, 1941, soil, Unterengadin (Switzerland); type material; = CCAP 887/1 = UTEX 153 = ATCC 30441 = SAG 887-1: (19, 42)

T 10 H. TRENKWALDER, 1975, soil, pine forest, Brixen, South Tyrol (Italy)

Vischeria stellata (R. Chodat ex Poulton) Pascher

BS 169 R. CHODAT, No. 185; = CCAP 887/2b = UTEX 312 = SAG 887-2; (19)

S u m m a r y : About 1600 strains of algae are maintained in the culture collection at the Botanical Institute, University of Innsbruck. A list of 324 strains is given, including 75 genera and 213 species, listed in alphabetical order; additional informations refer to isolator and identity with strains in other collections. The collection at Innsbruck comprises mostly soil-, airborne- and lichen-algae. All strains are available for purpose of research.

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