

LIST OF LICHENS FROM CALIFORNIA AND MEXICO, COLLECTED BY DR. EDWARD PALMER FROM 1888 TO 1892.

By J. W. ECKFELDT.

Roccella tinctoria DC. San Diego, California, September to December, 1888 (Nos. 203, 268a, 276d, 280, 284, 297). On low bushes where the ocean fogs had full effect.

Roccella leucophæa Tuckerm. Coronados Islands, August 18, 1888 (Nos. 260c, 261a); Gaudalupe Island, March 29 and 30, 1889 (No. 905c). Abundant on low bushes, and covering the face of exposed rocks. Growing so luxuriantly as to be readily mistaken for ordinary vegetation.

Roccella phycopsis Ach. On the west side of False Bay, 14 kilometers west of San Diego, California, September 1888 (Nos. 277d, 277g). Growing on low bushes, just above the ocean beach, in full influence of salt water.

Roccella fuciformis (L.) Ach. La Paz, Lower California, January and February, 1890 (No. 261c); Agiabampo, Mexico, October, 1890 (No. 792c). Growing on the ground, and on low bushes; exposed to the fog and to the effect of salt water.

Ramalina ceruchis (Ach.) De Not. Coronados Islands, August, 1888 (No. 260a); San Diego, California, and vicinity, December, 1888 (Nos. 1, 204, 268b, 276c, 277b, 277c, 278, 287, 293, 298). Growing on low bushes and on the face of rocks in such abundance that the rocks are hidden.

Ramalina homalea Ach. On the coast south and west of San Diego, California, August to December, 1888 (Nos. 260d, 275e, 292, 299, 310); south end of Guadalupe Island, March 29 and 30, 1889 (Nos. 905a, 905b).

Ramalina reticulata (Noehd.) Krempelh. San Diego, California, 1888 (Nos. 201, 209).

Ramalina linearis L. East side of False Bay, 11 kilometers southwest of San Diego, California, September, 1888 (No. 276g). On bushes, in a deep ravine where the ocean fogs had full effect.

Ramalina menziesii Tuckerm. San Diego, California, and vicinity (Nos. 211, 277a, 277h); Sweetwater Junction, 10 kilometers east of San Diego, California December, 1888 (No. 288); Agiabampo, Mexico, October, 1890 (No. 792 a).

Ramalina complanata (Sw.) Ach. La Paz, Lower California, January and February, 1890 (No. 85); San Diego, California, 1888 (No. 205); near Roseville, 3 or 4 kilometers west of San Diego, California, 1888 (No. 269f). On dead bushes, not far from the ocean.

Ramalina calicaris (L.) Fr. San Diego, California, 1888 (No. 294), and Mexico (No. 334f).

Ramalina calicaris canaliculata Fr. San Diego, California, December, 1888 (No. 293x).

Ramalina calicaris fraxinea Fr. Agiabampo, Mexico, October, 1890 (No. 792f).

- Ramalina calicaris farinacea** Schaer. No. 288 is a very broad state, quite unlike the narrower plant of the Eastern States. Vicinity of San Diego, California, December, 1888 (Nos. 283, 288).
- Ramalina pollinaria** Ach. San Diego, California, and vicinity, 1888 (Nos. 276a, 276b, 281).
- Ramalina crinita** Tuckerm. On bushes 5 to 10 cm. high. Harbor of San Diego, California, September, 1888 (No. 268c).
- Cetraria sæpincola chlorophylla** Wahl. A well marked but pale form. Harbor of San Diego, California, December 16, 1888 (No. 286).
- Usnea barbata florida** Fr. Mexico, 1890 (?) (No. 334a).
- Usnea barbata rubiginea** Mx. San Diego, California, and vicinity, September to December, 1888 (Nos. 202, 276a, 282, 296).
- Usnea longissima** Ach. Hanging in long, slender clusters from trees. Used by the natives as medicine for the blood. Purchased in the market at Colima, Mexico, January and February, 1891 (No. 1403).
- Alectoria canariensis** (Ach.) Mont. San Diego, California, 1888 (No. 208).
- Schizopelte californica** Th. Fr. A rare species. Growing in great confusion on the face of exposed rocks on the northeast coast of the largest of the Coronados Islands, 32 kilometers south of San Diego, California, August 18, 1888 (No. 260b).
- Theloschistes flavicans** (Sw.) DC. San Diego, California, 1888 (No. 200).
- Theloschistes parietinus** (L.) Norm. San Diego, California, 1888 (Nos. 289, 295).
- Theloschistes polycarpus** Ehrh. Near Roseville, 3 or 4 kilometers west of San Diego, California, 1888 (No. 269a); Gaudalupe Islands, under overhanging rocks, March, 1889 (No. 904).
- Theloschistes ramulosus** Tuckerm. Harbor of San Diego, California, September, 1888 (No. 268d).
- Parmelia perforata** (Jacq.) Ach. Mexico.
- Parmelia perforata** (Jacq.) Ach. *Forma hypotropa* Nyl. In a deep ravine in the vicinity of San Diego, California, September, 1888 (Nos. 276f, 279).
- Parmelia camtschadalis** (Ach.) Eschw. Mexico (?).
- Parmelia caperata** (L.) Ach. Mexico (?).
- Parmelia conspersa** (Ehrh.) Ach. On rocks and earthbanks, 11 kilometers southwest of San Diego, California, September, 1888 (Nos. 275e, 291).
- Physcia leucomela** (L.) Mx. Tepic, Mexico, January 10, 1892.
- Physcia hispida** (Schreb. Fr.) Tuck. On dead and decaying plants of *Euphorbia misera*, Roseville, California, September, 1888 (No. 270a); on low bushes at False Bay, California, September, 1888 (No. 276i); Harbor of San Diego, California, December, 1888 (Nos. 285, 206, 212).
- Lecanora pallida cancriformis** Tuck. Mexico, July 12, 1890 (No. 1989b).
- Lecanora cenisia** Ach. Harbor of San Diego, California, December 6, 1888 (No. 275x).
- Pertusaria flavicunda** Tuckerm. Point Como light-house, California, December 15, 1888 (No. 290).
- Pertusaria wulfenii** DC. South end of Guadalupe Island, March 29 and 30, 1889 (No. 903).
- Urceolaria scruposa** (L.) Nyl. Harbor of San Diego, California, December 6, 1888 (No. 275b).
- Cladonia pyxidata** (L.) Fr. East side of False Bay, near San Diego, California, September, 1888 (No. 275d).
- Cladonia fimbriata** (L.) Fr. California (No. 19c).
- Cladonia rangiferina** (L.) Hoffm. Mexico.
- Buellia oidalea** Tuckerm. One specimen (No. 213) well represents the muriform type of the spore, which is characteristic of the species. San Diego, California, 1888 (Nos. 213, 276b, 277f).