

34. GNAPHALIUM WRIGHTII Gray

Manzanilla del rio. This is a woolly herb from the Sierra Madre which is brought to Chihuahua by the Mexicans. It finds a sale, since they think its decoction good for colds. It may also be used as a wash for sores and ulcers.

35. MATRICARIA COURRANTIANA DC.

Manzanilla de Castilla. This small white daisy is a favorite plant in Mexican gardens, its decoction being used as a hot douche.

M. Chamomilla L. (Compositae). "In the markets the heads are found for sale, with more than 5% of the stalks and foreign substances. . . . The odor of the plant is aromatic and agreeable, its taste aromatic and sour. Contains a volatile acid dark blue in color which is soluble in alcohol. It is a tonic and stimulant to a dose of 16 grains. In large quantity it is an emetic." (*Farmacopea Latino-Americana*, p. 348).

36. TAGETES ERECTA L.

Flor de muerto. Sempual. The garden marigold is grown in Mexican gardens for use and sale as a medicine, as well as for ornament. Its decoction is thought to be an excellent remedy for diarrhea.

37. TAGETES LUCIDA Cav.

Hierba anís. The decoction of this strong-scented plant is drunk for colic and wind on the stomach. It is often taken with honey.

"This is one of the most widely used medicinal plants of western Mexico. The species has a wide distribution. The plants gathered by the country people are made up in small bundles and dried, and then put away for use. It is made into a tea, and supposed to have numerous virtues, including efficacy against scorpion bites, fever, ague, etc.

"Dr. Palmer says that in Colima it is made into an insect powder. This is the same plant as the Santa María of the Cora Indians." (Rose: Notes on the Useful Plants of Mexico, p. 231.)

38. TAGETES MICRANTHA Cav.

Anisillo. A small, weedy, strong-scented herb, whose decoction is drunk for stomach trouble.

39. ZINNIA GRANDIFLORA Nutt.

Cinco llagas. A weed picked from the fields, a relative of the garden zinnia. Its decoction is drunk as an astringent for diarrhea.

40. CACALIA DECOMPOSITA Gray

Matarique (Mex.); *pi-tá-wi* (Tar.) This is one of the most esteemed medicinal plants furnished by the Tarahumara Indians of the barrancas to the Mexicans of Chihuahua. There they consider it a cure for diabetes, and pay the Indians a good price for it. The plant is listed in the *Farmacopea Latino-Americana*, which supplies these data:

"It is a plant of a meter in height, flowers in September and October. The root is aromatic and presents, upon breaking, an abundant zone of yellow resin. It comes from the mountains of Santa Cruz (Sonora), and Mapula (Chihuahua).

"The root is employed, since it contains two resins, essential oil, glucoside, tannic acid, and grease. The hydro-alcoholic preparation of the root acts to paralyze the motor system of the striated muscles, and the heart; it produces a light anaesthesia by its local peripheral action.

"The tincture favors scarification of the tissues when applied on ulcers, wounds, etc., by its antiseptic action owing to a coating that it forms.

"Given internally, it produces emetic and cathartic effects, and general retardation, but on occasions its use has caused chloroform accidents of a grave nature.

"Rheumatic pains, especially of the joints, as well as neuralgic pains are calmed by its application in *loco dolente*. The rapid scarification of ulcers and wounds is favored by washing them with a mixture of the tincture in water, or by the tincture alone.

"In the hospital of San Andrés they used the same tincture as a purgative, but the results were variable; with two doses up to 100 grams chloroformic accidents occurred involving the heart. With two doses of 30 grams no purgative effects were obtained, and its use only succeeded in calming indigestion and headache.

"The ordinary preparation is the tincture of the root (one part of the root to five of alcohol or an 80% solution). It is administered internally in doses of 30–100 grams with variable effects. Externally it is applied as a sedative of pain by rubbing the *locum dolentem*. As a vulnerary it is mixed with equal parts of water."

This plant, after being pounded and boiled for fifteen minutes, is used by the Tarahumaras as an internal remedy for colds. Its properties as a vulnerary are understood by them, as they wash wounds in its decoction. Its paralytic effects on the central nervous system are utilized by the Tarahumaras, whom I saw using it as a fish poison, in water retained by damming.

The purgative property of the plant is also known to the Tarahumaras. A bundle of the roots that can be encircled by the thumb and finger is ground on the metate. This is drunk with plenty of warm water. The Indians say that it is a very drastic purgative, and that its action must be stopped by eating cold *atole* (corn mush).

ZOOLOGY.—*A new Pinnotherid crab from the Hawaiian Islands.*¹

MARY J. RATHBUN, United States National Museum.

Dr. Charles H. Edmondson of the Bernice P. Bishop Museum has submitted for report a new form of the curious genus *Aphanodactylus* described by Tesch.²

Aphanodactylus edmondsoni, new species

Compared to *A. sibogae* Tesch, carapace narrower, 9.6 x 16.2 mm., as against 6 x 11.25. Fronto-orbital distance greater, 7.6 mm., or more than 4/10 of carapace width of *sibogae*. Posterior width 8.6 mm., instead of 1-1/2 x fronto-orbital distance. Antennal flagellum not 2 or 3-jointed, but 10-jointed, terminating in a slender seta. Palp of maxilliped long, overreaching a little the merus-ischium suture. Merus-ischium narrower than in *sibogae*; inner margin of merus nearly straight instead of convex. Merus of ambulatory legs 1-3 armed below with a large triangular spine-tipped tooth at distal third; the tooth of third right leg only is bispinose at tip, apparently an abnormality. Merus of last leg has two very small spines on posterior margin. Carpus of ambulatory legs tapering distally (not narrowed in female of *A. sibogae*). Carpus-propodus hairy on both margins, merus hairy below.

¹ Published with the permission of the Secretary of the Smithsonian Institution. Received February 19, 1932.

² Decapoda Brachyura Siboga Exped., Mono. XXXIX c¹, 1918, p. 283, pl. 18, fig. 2.

Fine hair borders arm, inner angle of wrist, prehensile margins of fingers; a small patch at middle of inner surface of palm; long hair on lower margin of carapace, margin of abdomen and surface of maxilliped; a row of short thin hair above edge of rostrum.

Type-locality.—Oahu, from worm tube, Nov. 27, 1931. Holotype in Bishop Museum.

ZOOLOGY.—*A new species of Cyclops from the Philippine Islands.*¹

C. DWIGHT MARSH, United States National Museum.

The following description is of the mature female.

***Cyclops philippinensis*, new species**

The first segment of the cephalothorax is considerably longer than the remaining part.

The abdomen, Fig. 1, is about two-thirds as long as the cephalothorax. The first segment about equals in length the three following, and its greatest breadth about equals its length. The second, third, and fourth segments gradually diminish in length, the fourth being about one-half as long as the second. The posterior borders of the abdominal segments are very finely dentate.

The branches of the furca about equal the combined length of the third and fourth segments. The lateral setae are situated at about two-thirds the length of the furca. Of the terminal setae, Fig. 3, the first and fourth are nearly equal in length, the fourth being slightly longer. The third seta is longer than the second and is somewhat more than four times the length of the fourth.

The segments of the abdomen and furca are covered with minute pellucid dots. These dots are arranged in transverse lines on the first segment and sometimes on the other segments. The dots are not projections from the surface, and so far as the author knows, are peculiar to this species.

The first antennae, Fig. 2, about equal in length the cephalothorax. They have seventeen segments and there are no hyaline lamellae on the sixteenth and seventeenth segments. In the second antennae, Fig. 4, the third and fourth segments are about equal in length. The lower border of the second segment of the posterior maxillipede has crenulations, Fig. 5, resembling those found in *C. leuckarti*.

The spinous armature of the terminal segments of the exopods of the swimming feet is represented by the formula 2, 3, 3, 3. In the fourth feet, Fig. 7, the terminal spines of the third segment of the endopod are nearly equal in length.

The membrane connecting the bases of the swimming feet has two rounded processes, each armed with a number of dentations, Figs. 7 and 8. Such pro-

¹ Received February 9, 1932.

Fig. 1. *Cyclops philippinensis*: abdomen of female, x 223. Fig. 2. *Cyclops philippinensis*: first antennae of female, x 223. Fig. 3. *Cyclops philippinensis*: furca and furcal setae of female, x 223. Fig. 4. *Cyclops philippinensis*: second antenna, x 438. Fig. 5. *Cyclops philippinensis*: fifth foot, x 438. Fig. 6. *Cyclops philippinensis*: second segment of posterior maxillipede, x 438. Fig. 7. *Cyclops philippinensis*: fourth foot, x 223. Fig. 8. *Cyclops philippinensis*: connecting membrane of fourth feet, x 438.