

mucronate tip), and pubescence, to *Chrysopsis jonesii* Blake, of southern Utah, though that plant is more compact, with smaller leaves and smaller sessile heads.

Brandege (1893) listed *Chrysopsis* sp. from the Sierra San Pedro Mártir with no comment. I have seen no collection of his.

For the type collection of *H. martirensis*, Dr. R. C. Jackson reports a somatic chromosome number of $2n = 18$.

***Stephanomeria monocephala* Moran, spec. nov. (Fig. 11)**

Planta pulvinata, ad 3 dm lata. Folia rosulata 5-15 oblanceolata, acuta, ½-3 ½ cm longa, 1-5 mm lata, sparsim glanduloso-puberulenta, superne utraque margine inaequaliter 0-3-dentata. Pedunculi ½-8 cm alti, superne 0-2-bracteati. Capitula solitaria, 14-21 mm diametro, 5-8-flora. Involucra cylindracea, 7-9 mm longa, 2-3 mm lata, bracteis lanceolatis, interioribus 5-9 aequalibus, exterioribus 3-5 imbricatis. Corollae tubus 2 ½-4 mm longus, ligula rosea, 4 ½-9 mm longa, 2 ½-4 ½ mm lata, elliptico-oblonga, truncata, apice 5-lobata. Achaenia prismatica, 2 ½-3 mm longa, lateribus anguste sulcata, costis minute scaberulis. Pappi setae persistentes, albae, biseriatae, interioribus 20, fere ad basin plumosis, 4-6 mm longis, exterioribus alternantibus, minutis. Typus: Moran 15261 (SD 68877). Species habitu pulvinato et capitulis solitariis distinctissima, pappi setis exterioribus minutis etiam insignita.

Plant caespitose, forming dense cushions to 3 dm wide and 1 dm high, the interstices packed solid with soil. Stems 2-5 mm thick, each branch with a rosette of ca. 5-15 leaves and covered below with persistent dead leaves. Leaves oblanceolate to linear-oblanceolate or occasionally spatulate, mostly acute, entire or commonly 1-3-dentate on each margin above, ½-3 ½ cm long, 1-5 mm wide above, ½-1 ½ mm wide above the broadened base, subglabrous or (in the same plant) commonly glandular-puberulent with pluricellular trichomes ca. 0.1 mm long, the teeth spreading or slightly reflexed, triangular, the upper mostly longer, to 1 mm long, the midrib prominent, the lateral veins obscure. Peduncle terminal ½-5 (-8) cm tall, slender, striate or angled, glandular-puberulent, often with 1 or 2 small lanceolate bracts above. Heads solitary, 10-12 mm high, 14-21 mm wide, with 5-8 but commonly 6 florets, flowering May to July. Involucre cylindrical, 7-9 mm long, 2-3 mm wide, of 5-9 but mostly 6 equal bracts and 3-5 graduated shorter ones, the bracts lanceolate, acute to narrowly rounded, 1-2 mm wide, green or purplish with scarious margins, minutely granular-glandular and often also sparingly glandular puberulent, the longer ones sparsely villous at apex. Receptacle shallowly pitted, glabrous. Corolla 7-13 mm long, the tube whitish, 2 ½-4 mm long, with a few scattered trichomes ventrally above, the ligule light to deep pink or rarely white, elliptic-oblong, truncate and 5-lobed, 4 ½-9 mm long, 2 ½-4 ½ mm wide, the lobes 1-1 ½ mm long and a third as wide, triangular-ovate, obtusish. Anthers 3 ½-5 mm long, sagittate at base; pollen white. Style 7-12 mm long, lavender above, ascending-puberulent, the style branches ca. 1 mm long. Achenes light tan, pentagono-prismatic, only slightly narrowed towards base and apex, 2 ½-3 mm long, 0.8-1.0 mm thick, the sides slightly channeled or nearly flat except for a straight shallow longitudinal groove ca. 0.1 mm wide, the angles sparsely and minutely ascending scaberulous. Pappus persistent, white, 4-6 mm long, double, the inner bristles ca. 20, stiff, slightly widened and connate at base, plumose nearly to base with pinnae 0.3-0.5 mm long, the outer bristles inconspicuous, alternating, very slender, smooth or scaberulous, mostly less than 1 mm long.

Type collection. — Common in crevices of north- and east-facing rocks and cliffs at 2800 meters elevation, Cerro "2828", east rim of the Sierra San Pedro Mártir, Baja California, Mexico (near 31°02'N, 115°27'W), 5 July 1968, *Moran 15261* — holotype: SD 68877; isotypes: K, MEXU, UC, US, etc.

Distribution. — Known only from the type locality. Other collections: 15064, 15332, 15403, 16533.

Discussion. — This plant appears to be quite limited as to habitat: despite wide collecting in the general area on several trips, I found it only in the one place. However, there are several similar cliffs on the east rim where it probably can be expected. Associated species include *Selaginella asprella* Maxon, *Sedum niveum* Davids., *Heuchera leptomeria* var. *peninsularis* Rosend., Butt., & Lak., *Saxifraga eriophora* S. Wats., *Potentilla wheeleri* S. Wats., *Haplopappus pulvinatus* Moran, and *Tanacetum bajacalifornicum* Moran.

Stephanomeria monocephala differs from others of the genus in its polster habit and solitary heads. The regular outer series of minute pappus bristles also is noteworthy; but although the pappus of *Stephanomeria* is always described as uniseriate, a variable number of similar tiny bristles occurs in several other species.

In other floral and fruiting characters, *S. monocephala* appears to be an average member of the genus. However, it differs from every other species in some combination of characters of involucre, flowers, achenes, and pappus. Mr. Leslie D. Gottlieb, a student of the genus, suggests that it is closest to *S. lactucina* A. Gray, native from eastern Oregon to Nevada and the Sierra Nevada. That is a larger plant, with stems arising singly from slender rootstocks and usually bearing several heads; the heads are larger, with more and larger florets; and the achenes are larger.

***Tanacetum bajacalifornicum* Moran, spec. nov. (Fig. 15)**

Herba aromatica caespitosa perennis, trichomatibus biramosis sparsim instructa. Folia basalia 2-5 cm longa, 1-2 cm lata, plerumque biternate divisa, segmentis linearibus, obtusis, 1-1 1/2 mm latis, petiolo laminam excedenti. Caulis florifer 1-2 dm altus, capitulum unum vel plura ferens, foliis superioribus integris. Involucra hemisphaerica, 4-6 mm alta, 4-8 mm lata, bracteis 13-25, 3-seriatis, ellipticis, 1 1/2-3 mm latis, marginibus scariosis purpurascens. Receptaculum nudum. Flores marginales pistillati 6-15, corollis 2 1/2 mm longis, 4-dentatis. Flores disci perfecti 40-150, corollis 3 mm longis. Pappus nullus. Achenia non visa. Typus: Moran 15613 (SD 69075). A ceteris speciebus caespitosis turmae Sphaeromeriae foliis caulibusque sparsim pubescentibus nec argenteis differt. A T. capitato, cui foliorum forma similis est, capitulis majoribus minusque confertis, bracteis numerosioribus, et floribus numerosioribus majoribusque praeterea differt.

Aromatic caespitose perennial, to 2 dm wide. Caudex to 2 dm long and to 1 cm thick at base, the branches 2-5 mm thick, brown below with persistent shingled leaf bases. Herbage at first thinly canescent with appressed crinkly biramous hairs, at maturity mostly subglabrate. Leaves alternate, thick, glandular pitted, the basal ones ca. 10-15, crowded, 2-5 cm long, the base thin, clasping, ca. 4 mm wide, the petiole exceeding the blade, strap-shaped, ca. 1 mm wide, the blade 1-2 cm wide, biternately divided or some pedately or pinnately and then ternately divided, the segments linear or oblong, obtuse, 1-1 1/2 mm wide. Floral stems terminal, nodding at first, slender, 1-2 dm tall, low ridged, with 10-15 linear leaves ca. 1 mm wide, the lower 1-2 cm long, ternately divided near apex, the upper shorter and entire. Heads whitish, solitary or with 1-2 smaller ones crowded below or with a few additional small ones scattered in upper axils. Involucre hemispheric, 4-6 mm high, 4-8 mm wide (to 10 mm wide pressed), the bracts 13-25, in about 3 nearly equal series, elliptic, acute to rounded, 4-6 mm long, 1 1/2-3 mm wide, the midpart stiff coriaceous below, in all but the innermost thick and green and somewhat glandular above, the broad margins scarious, purplish, erose, pilose-ciliate in lower half, the inner narrower. Receptacle conoidal, naked, 1 1/2-3 mm high and thick. Pistillate marginal florets 6-15; corolla ca. 2 1/2 mm long, tubular, nearly regular, with 4 triangular teeth; style branches ca. 0.6 mm long, well exerted. Perfect disk florets ca. 40-



Figure 10. Flowering plant of *Heterotheca martirensis*, in the high Sierra San Pedro Mártir, 14 September 1968; part of the type collection (15612).



Figure 11. Flowering plant of *Stephanomeria monocephala*, in the high Sierra San Pedro Mártir, 5 July 1968; part of the type collection (15261).