WESTERN PLANT STUDIES. IV

AVEN NELSON AND J. FRANCIS MACBRIDE

Plagiobothrys Harknessii (Greene), n. comb.—*Sonnea Harknessii* Greene, Pitt. **1**: 23. 1887.—Quite distinct from *P. Kingii*, its nearest relative, as GREENE has well shown (*l.c.*). The following representative collections indicate that its range is much greater than originally supposed. NEVADA: Eagle Valley, Ormsby County, June 10, 1902, *C. F. Baker* (1046); CALIFORNIA: Sierra County, 1875, *J. G. Lemmon* (794); OREGON: near Desert Well, 8 miles south of Big Springs, July 5, 1894, *J. B. Leiberg* (403).

Plagiobothrys foliaceus (Greene), n. comb.—*Sonnea foliacea* Greene, Pitt. **1**: 222. 1888.—This seems to be a well marked species, the dorsal depression of the nutlets being particularly unique, but it is apparently still known only from the original collection.

The maintenance of *Sonnea* Greene (*l.c.* 22) does not seem to be at all desirable. Although, as pointed out by GREENE, the character of the scar in this group is somewhat different from that of the other species of *Plagiobothrys*, the plants are habitally the same when one takes the genus into consideration in its entirety. Moreover, the scar character is not so characteristic in all the species as might be desired if they are to be removed from true *Plagiobothrys*. In this connection JONES has called attention to the fact that *P. Jonesii* (*S. Jonesii* [Gray] Greene) is an *Amsinckia* in everything but its white flowers (Contrib. West. Bot. **12**: 57. 1908). The pubescence of *P. Jonesii* and the tesellated nutlets surely suggest a relationship to *A. tessellata*, but the white and short corollas that are so widely at variance with the long yellow ones of *Amsinckia* are perfectly congeneric with the SONNEA section of *Plagiobothrys*. Altogether, *Sonnea* would seem superfluous in a group of genera already merging, but which, with *Sonnea* eliminated, seem well enough marked when dealt with in their aggregates.

Cryptantha vinctens, n. sp.—Annual, 10–15 cm. high, rather sparsely pilose or hispidulous, the leaves more or less papillose;

leaves essentially oblong, 1–2 cm. long, 2–3 mm. broad: inflorescence about 1 cm. long, peduncled, terminating the main stem and its lateral branches, mostly 2-forked, close even in age: corollas minute: calyx persistent and often in fruit very finely appressed-hispid, without a lens appearing silky; sepals ovate-lanceolate, 2.5–3.5 mm. long, the midrib pronounced but not cartilaginous: nutlets 3–4, nearly 2.5 mm. long, mainly ovate, lustrous brown, or gray-spotted with brown, very smooth, acutely angled, but not margined; groove closed or slightly open near the forked and closed base.

Rocky slopes Malheur Valley, near Harper Ranch, Oregon, alt. 1100 ft., June 10, 1896, *J. B. Leiberg* 2235 (type in Gray Herb.).

This specimen was distributed as *C. submollis* (Gray) Coville (*C. utahensis* [Gray] Greene), and that species is its nearest ally. However, the perfectly smooth, less sharply angled nutlets, with closed or nearly closed groove, and the larger sepals are some of the characters which forbid its being referred to *C. utahensis*. The larger calyces suggest *C. mohavensis* Greene, but in that species and in its near relative *C. oxygona* (Gray) Greene the flowers are conspicuous and the nutlets broader and acutely margined. *C. vinctens* and *C. utahensis* occupy positions analogous to those of *C. mohavensis* and *C. oxygona*, except that the two former are more distinct from each other than are the two latter. Furthermore, *C. vinctens* and *C. Bartolomaei* Greene (the only other member of the group) are (as pointed out by GREENE in regard to his species) connecting links between the smooth-fruited species in the deciduous calyx and persistent calyx groups. *C. Bartolomaei* is apparently confined to Lower California, and there it is unique in its pubescence and minute nutlets. None of the species, except *C. vinctens*, has been secured farther north than Utah or Nevada, the distribution of the group apparently centering in the desert areas of the southwest.

Oreocarya dura, n. sp.—Perennial, the single caudex densely clothed with leaf bases of many years: stems usually single, 1–1.5 dm. high, strigillose and densely hispid with widely spreading hairs: leaves oblanceolate or nearly oblong, about 3 cm. long and 5 mm. wide, not greatly reduced on the stem except in the inflorescence and there bractlike, densely shaggy with an indument of fine tangled hairs almost concealed by numerous pustulate-based spreading hirsute hairs: inflorescence a thrysoid glomerule: calyx densely hispid with greenish yellow hairs, the linear divisions about 4.5 mm. long, a little longer than the corolla tube: corolla white; appendages prominent: fruit unknown.