

PENSTEMON METCALFEI (SCROPHULARIACEAE), A VALID SPECIES

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In 1905, O.B. Metcalfe collected a *Penstemon* under spruce at the Look-out Mine in upper Trujillo Canyon in the Black Range of southern New Mexico (*Metcalfe 1605*, NMC!, NY!). Wooton and Standley (1909a) described it as *Penstemon puberulus* Woot. & Standl. Then, realizing that the specific epithet was previously used, they (1909b) proposed the new name, *Penstemon metcalfei* Woot. & Standl. Keck (1945) decided that *P. metcalfei* was synonymous with *Penstemon whippleanus* Gray, based on his examination of the NY specimen cited above. His only reservation was that the stem was puberulous, which differed from the typically glabrous stem of *P. whippleanus*.

In 1967, I collected a *Penstemon* under spruce beside the Black Range Crest Trail on Cross O Mtn (*Todsen s.n.*, NMC) and determined it to be *P. metcalfei* using Wooton and Standley's "Flora of New Mexico" (1915). This was the second time the taxon had been collected. Only later did I become aware that Keck had submerged it under *P. whippleanus*.

In the summer of 1995, I collected plants from the Cross O Mtn. Location (*Todsen 95-7-1*, NMC) and compared the live material with the type and isotype sheets at NMC. There was no significant morphological difference in plants from the two locations. At the same time, I collected *P. whippleanus* (*Todsen 95-7-7*, NMC) from the Sandia Mountains, the type

TABLE 1. Morphological differences between *P. metcalfei* and *P. whippleanus*.

| Characteristics | <i>P. metcalfei</i> | <i>P. whippleanus</i> |
|-----------------|--------------------------|-----------------------|
| Stem | Puberulous | Glabrous |
| Leaves | Entire | Toothed |
| Corolla | Pale blue-lavender | Deep red-purple |
| | Slightly gibbous | Abruptly gibbous |
| Lower Lip | Wider than long | Longer than wide |
| Staminode | Not or slightly exserted | Well-exserted |
| | Bearded 1/2 its length | Glabrous or with tuft |
| Stamens | Not explanate | Explanate |

locality, and compared that with the Cross O Mtn. Plants. Differences between the two are shown in Table 1. These characteristics put *P. metcalfei* in Keck's subsection *Graciles* rather than in subsection *Humiles* where he had placed *P. whippleanus*.

Later, when Crosswhite (1965a) was revising *Penstemon* section *Penstemon*, approximately equivalent to Keck's *Penstemon* section *Spermunculus*, he placed *P. whippleanus* in series *Whippleani* and retained series *Graciles*, equivalent to Keck's subsection *Graciles*. Crosswhite (1965b) also addressed a situation in series *Graciles*, where he divided the series into two "alliances," *Graciles* and *Oliganthi*, based on differences in distribution, habit, and habitat. *Penstemon metcalfei* falls within "alliance" *Oliganthi* as Crosswhite defined it.

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