

Leslie Gulch monardella (*Monardella angustifolia*)



THREATENED



Flower (left), habit (center), and habitat (right) of Leslie Gulch monardella. Photos by Gerald D. Carr (left; Courtesy of OregonFlora) and ODA staff (center and right). If downloading images from this website, please credit the photographer.

Family

Lamiaceae

Plant description

Monardella angustifolia is a fragrant, 15-30 cm tall subshrub with a woody base. The lorate to very narrowly elliptic leaves are often fascicled (bundled), spreading to reflexed, 10-13 mm long by 1.9-2.5 mm wide, and commonly conduplicate. The pale to grayish green leaves are punctate glandular, puberulent above and below, and sometimes glabrous or nearly so. The inflorescences are usually solitary, but are occasionally an open compound cyme, especially when there is abundant water and (or) nutrients available. The flowers are in terminal glomerules, with the densely clustered flowers on the primary stem being 16-18 mm wide and 8-11 mm wide on axillary stems. Inflorescence bracts are 7-8 mm by 3-4 mm, smaller than the calyxes, straw to green in color with purple tinge, and elliptic to narrowly elliptic. The pedicels are 1.0-1.5 mm long; the flower calyx is 6-7 mm, green with the apex tinged purple. Corollas of *M. angustifolia* are 13-16 mm long, lavender in color, and rapidly deciduous after pollination. The fruits are an oblong nutlet 1.6-1.7 mm by 0.7-0.8 mm, brown to dark brown in color and mottled light and dark brown.

Distinguishing characteristics

Monardella angustifolia can be distinguished from *M. odoratisima* ssp. *glauca* and other *Monardella* of the Pacific Northwest by its restrictedness to ash tuff outcrops and often-fascicled narrow leaves that are spreading and conduplicate. The interglomerular bractlets of many *M. angustifolia* are also unique in that

they are narrowly oblong and pubescent, with spreading 0.2 mm glandular trichomes. The presence of 0.2 mm long spreading glandular trichomes on the calyx are also diagnostic of *M. angustifolia*.

When to survey

Survey when plants are flowering in June to July, sometimes beginning as early as late May. Summer rain can extend the flowering season or produce a second late-season flowering period as late as early October.

Habitat

Monardella angustifolia is found growing along steep slopes in sagebrush steppe and ash bed habitat within the Owyhee River watershed and Succor Creek basin in southeastern Oregon and neighboring Idaho. Leslie Gulch populations grow at elevations of 2,700 to 4,600 feet on the ash tuff outcrops. This species is often the dominant plant growing on the ash soil making it an attraction for numerous pollinators. Other plant species associated with *M. angustifolia* include *Artemesia tridentata*, *Leymus cinereus*, *Eriogonum novonudum*, and native perennial bunchgrasses.

Range

Monardella angustifolia occurs in Oregon and Idaho with three distinct population centers around Leslie Gulch canyon, southeast of Leslie Gulch along the Oregon-Idaho border, and in Chalk basin along the Owyhee Wild and Scenic River. All known Oregon occurrences of Leslie Gulch monardella occur on Bureau of Land Management land.

Oregon counties

Malheur

Federal status

No status

Threats

The major threat for *M. angustifolia* is invasive plants as several sites have experienced encroachment of non-native species such as *Bromus tectorum*, *Lactuca serriola*, and *Taeniatherum caput-medusae*. These species not only create competition for resources, but also increase the likelihood of fires and post-fire weed proliferation. Increased weeds can create thatch accumulation that degrades habitat and increases the fuel load of a traditionally sparsely vegetated habitat putting *M. angustifolia* at increased risk of burning. Road maintenance is noted as a threat (e.g., damage from road equipment and grading) at one site with plants growing on the road shoulder. Trampling of plants from foot traffic is unlikely due to the steepness of *M. angustifolia* habitat. However, erosion from human activity or heavy flooding may wash out plants. Small population size should be considered a threat as this can result in a decline of reproductive individuals, genetic diversity, and seed production and viability.

References

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