

***Senecio spartioides* Torr. & Gray**
ASTERACEAE

many-headed groundsel

Synonym: *S. multicapitatus* Greenm. ex Rydb.



General Description.—Many-headed groundsel is also known as broom groundsel, broom butterweed, or grass-leaved ragwort (Elmore 1976, Epple 1995). This plant produces many stems from a large woody crown, in a tight to spreading cluster, giving it a broom-like appearance. Plants range in height from 20 cm to slightly more than 1 m. In large plants, some stems may lean over, becoming almost decumbent. The leaves are bright green, both lobed (pinnately) or nonlobed, alternate, linear, 4 to 10 cm long, and to 5 mm wide, generally hairless or slightly pubescent (Carter 1997, Great Plains Flora Association 1986, Ivey 1995, Martin and Hutchins 1980-81, Weber and Wittman 2001a and 2001b). This plant is best classified as a subshrub because even though the stems do become woody, especially the bases, it often dies back during the winter to less than 20 cm above the ground-line.

Taxonomy.—Two varieties are recognized: the typical variety, *S. spartioides* var. *spartioides*, and *S. spartioides* var. *multicapitatus* (Greenm. ex Rydb.) S.L. Welch (Allred 2002). The leaves of variety *spartioides* are generally simple, or infrequently with small lobes near the base, and the plant is hairless. The variety *multicapitatus* tends to have leaves irregularly pinnately divided, more hairs, and smaller, more numerous flower heads. The latter variety is also synonymized with the full species designation: *S. multicapitatus* Greenm. ex Rydb. (Kartesz 1994).

Range.—This is a wide-ranging species occurring from western Texas, west through New Mexico, northern Mexico, into Arizona, Utah, and California, north to Wyoming, western Nebraska, and southwestern South Dakota. Variety *spartioides* tends to occur further north and west within this range, while variety *multicapitatus* tends to be more southern in its distribution (Kearney and others 1951, Great Plains Flora Association 1986). Within its range it occurs at elevations from about 1,070 m to 2,745 m.

Ecology.—Many-headed groundsel occurs on plains, open slopes, valleys, arroyos, and semi-stabilized dunes in piñon-juniper woodlands, ponderosa pine forests, and desert areas. It tends to be an early colonizer of disturbed soil situations, is a prolific seed producer because of the numerous flower heads, and is generally a short-lived (2 to 4 years) perennial.

Reproduction.—This species produces numerous yellow-flowered heads, the ray flowers numbering from four to eight per head (over 18 flowers with the disk flowers included). The heads are 7 to 12 mm high, 3 to 7 mm wide, subcylindric to cylindric with about eight to 12 phyllaries, and the rays are from 7 to 12 mm long. It generally blooms in the late summer and fall but will bloom early in the summer given sufficient moisture. Hence, the full range of potential blooming runs from May into early November, depending on local environmental conditions. A bright white fluffy pappus enables easy dispersal of seeds by the wind.

Growth and Management.—Seeds will germinate under moist conditions in the fall, the seedlings over-wintering. Growth continues slowly in the spring but is rapid once summer rains begin. Many-headed groundsel is a short-lived perennial. Most plants appear to survive only 2 to 4 years, some perhaps slightly longer. This species, although toxic to livestock, is not palatable and is generally not highly abundant or dominant in most habitats to be a significant management problem.

Benefits.—Many-headed groundsel will colonize open disturbed areas and provide quick ground

cover in a natural succession process. Although relatively short-lived the perennial nature of the plant further helps stabilize soil for longer-lived perennials to eventually become established. Many-headed groundsel is toxic to cattle, but it is infrequently eaten (USDA 1937, Kearney and others 1951, Warnock 1974). This species should be utilized more in urban and native plant landscaping. When in bloom it bears, as the name implies, numerous yellow flower heads, adding considerable color to a desert backyard. It is a prolific seed producer and will easily regenerate itself. This may pose a problem for some gardeners, managing the abundance of seedlings, although many of the seedlings will not survive to maturity within a natural landscape anyway.

References

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