

## WESTERN YARROW

*Achillea millefolium* L. var.  
*occidentalis* DC.

Plant Symbol = ACMIO

Contributed by: USDA NRCS Bridger Plant  
Materials Center



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### Alternate Name

Woolly yarrow

### Uses

**Conservation:** It is an early successional species that readily establishes on disturbed sites. Western yarrow is recommended for adding species diversity in native seed mixtures for rehabilitation of disturbed sites such as rangelands, minelands, roadsides, park and restoration areas, prairie reconstruction projects, and farm bill program conservation plantings. Secondary use is for ornamental application in pollinator friendly, low maintenance, or naturalized landscapes.

**Forage:** It is a food source for bighorn sheep, pronghorn antelope, and deer. Sage grouse, especially chicks, and other upland birds rely heavily on the foliage of western yarrow as a food source. Domestic sheep and goats derive a fair amount of forage value from western yarrow, while cattle and horses mostly graze the flower head. The volatile oils, alkaloids, and glycosides are considered toxic, but the plant is seldom overgrazed by foraging animals.

**Ethnobotanic:** Native Americans used western yarrow for many purposes, such as a tea to cure stomach ailments, a poultice on infected wounds, and as a mosquito repellent.

### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

### Weediness

Western yarrow is not to be confused with the introduced, invasive plant, common yarrow (*Achillea millefolium* var. *millefolium*). Common yarrow has origins in Eurasia, the European continent, and the islands of Scandinavia. This introduced species is considerably different from western yarrow in that it has a much taller stature, aggressive vigor and weediness characteristics, and initiates a later sequence of flowering and seed ripening. Please consult with your local NRCS Field Office, Cooperative Extension Service office, or state natural resource or agriculture department regarding its status and use. Weed information is also available from the PLANTS Web site at [plants.usda.gov](http://plants.usda.gov).

### Description

Western yarrow is a native, herbaceous perennial in the Aster Family. It is a very common wildflower that grows erect from creeping rootstocks, to a height mostly 10 to 36 in. (25 to 90 cm) tall. The leaves of western yarrow are densely hairy, and lacy and fern-like in appearance, as they are finely dissected into numerous, short and narrow divisions not over 0.04 in. (1 mm) wide--millefolium means a thousand leaves in Latin. Common yarrow leaves, in comparison, are smooth or only sparsely hairy; and the leaf segment is longer, more rounded, and lance-shaped. The somewhat rounded terminal clusters of flower heads of western yarrow are normally white to cream-colored and have an extended bloom period from May to September. For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Web site.

### Adaptation

Western yarrow is one of the most widely recognized and adaptable wildflowers in the western United States. Its range of distribution includes many habitats across Canada, the Great Plains, and the western United States. Western yarrow is very drought-tolerant and exhibits good survival in droughty conditions on gravelly loam and thin or sandy soils.

### **Establishment**

Seed of western yarrow is non-dormant and readily germinates when spring planted at a very shallow depth. It tends to be less competitive in early development and becomes more so with age.

Western yarrow produces very few flowers the establishment year, but will easily set seed in subsequent years. It is moderately rhizomatous, developing as a scattered colony that maintains a semi-evergreen state when dormant.

### **Management**

New seedlings may need protection from trampling and some weed control during establishment.

Western yarrow vigor, esthetics, and stand persistence after establishment may be sustained with properly timed grazing or defoliation of associated species.

### **Pests and Potential Problems**

Inflorescences that are harvested for seed production often contain small quantities of insect larvae and numerous live insects. There is no apparent short- or long-term effect on the seed in any way. Many beneficial and pollinating insects, such as minute pirate bug (*Orius*), big-eyed bug (*Geocoris*), hoverflies (Syrphidae), and several tachnid flies (*Archytas apicifer*, *Gymnosoma*, *Tricopoda pennipes*, *Cylindromia*) are known to frequent yarrow plants. Pest insects include common leaf bugs (*Lygus*) and flea beetles (Chrysomelidae). Root rot and mildew may occur in poorly drained soils.

### **Environmental Concerns**

This plant is a common component of such ecological sites as shallow, silty, shallow to gravel, and silty steep. Associated species include western wheatgrass (*Pascopyrum smithii*), bluebunch wheatgrass (*Pseudoroegneria spicata*), prairie Junegrass (*Koeleria macrantha*), Sandberg bluegrass (*Poa secunda*), common gaillardia (*Gaillardia aristata*), big sagebrush (*Artemisia tridentata*), and prairie coneflower (*Ratibida columnifera*). Western yarrow is a pioneer species and considered an increaser where the forage resource has been over utilized. It is seldom regarded as a problem weed except on heavily disturbed, arable sites with favorable environmental conditions. Western yarrow should be considered noninvasive when used within a diverse plant community in its anticipated area of adaptation.

### **Cultivars, Improved, and Selected Materials (and area of origin)**

Great Northern Germplasm is a selected class release of western yarrow originally collected in 1988 in Flathead County, Montana. This 2004 release was selected for top performance in vigor, height, seedhead production, and survival from among 29 accessions of native yarrow from Montana and Wyoming. It is adapted for use in northern Idaho, and all of Montana and Wyoming, except the Red Desert and Bighorn Basin. G<sub>1</sub> seed (analogous to Foundation seed) will be maintained by the USDA-NRCS Bridger Plant Materials Center and is available to commercial growers through the Foundation Seed Program at Montana State University-Bozeman and the University of Wyoming Foundation Seed Service at Powell, Wyoming. Commercial production is limited to two generations beyond G<sub>1</sub>.

Yakima Germplasm is a source-identified, composite release of western yarrow from 27 collection sites on the U.S. Army Yakima Training Center in Yakima, Washington. Yakima Germplasm western yarrow is intended for use in the rehabilitation and restoration of western rangelands. The USDA-ARS Forage and Range Research Laboratory, Logan, Utah, will maintain G<sub>1</sub> seed and it will be made available to growers through the Utah Crop Improvement Association. Seed through the G<sub>4</sub> generation will be eligible for certification.

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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