

WILD PROSO MILLET

Panicum miliaceum L.

Family: *Poaceae* (Grass).

Other Scientific Names: None.

Other Common Names: Proso millet, broom corn millet, common millet.

Legal Status: Not categorized.



Identification

Growth form:

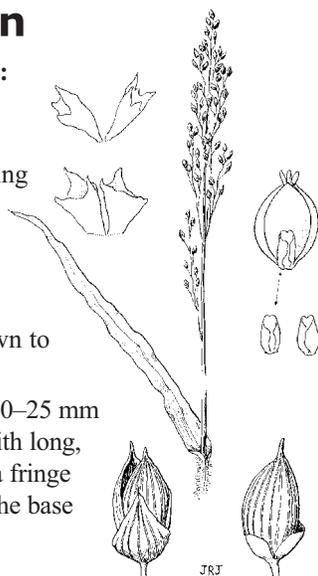
Annual grass.

Flower: The

inflorescence is a spreading panicle 15–30 cm wide and not fully extended from the leaf sheath.

Seeds/Fruit: Seeds are smooth, shiny, olive brown to black.

Leaves: Leaf blades are 10–25 mm wide. Sheaths are open with long, spreading hairs. There is a fringe of dense hairs (ligule) at the base of the leaf blade.



Stems: Mature plants are 0.6–1.8 m tall with erect stems that branch at the base.

Roots: Not rhizomatous, short fibrous root system.

Seedling: Both surfaces of the leaf blade as well as the sheath are densely hairy. The back of midrib often has a row of hairs protruding at a 90° angle. Auricles are lacking, and the ligule is hair-like. The large, shiny, dark brown to black seed coat often persists on the root system.

Similar Species

Exotics: Common witchgrass (*Panicum capillare*) has erect panicles and shorter spikelets.

Natives: None.



Impacts

Agricultural: One of the fastest-spreading weeds in the US corn belt, this weed is a vigorous competitor in row crops (Whitson et al. 1996) and appears to be most competitive in corn, soybeans, and beans (Wilson 1992).

Ecological: Not a problem in rangelands or natural areas.

Human: No information available.

Habitat and Ecology

General requirements: Commonly found in crops (especially corn) and along field edges and roadsides. In BC, it is particularly adapted to sandy, droughty soils, but it can grow on a wide range of soils.

Distribution: The plant occurs infrequently in the province but has been found in cornfields in the Kamloops, Salmon Arm, Enderby, and Abbotsford areas. It is present in the Okanagan, Thompson, Mainland, and Peace River agricultural reporting regions. It is common in much of the US.

Historical: Introduced from Eurasia. Grown for human consumption, chicken feed, or bird seed.

Life cycle: Seeds germinate in spring and throughout the summer when soil temperatures rise (Wilson 1992). Flowering begins in July and continues throughout the summer. Seeds mature from late August through September, depending on geographic location (Wilson 1992).

Mode of reproduction: By seed.

Seed production: A single plant may produce 400–2,100 seeds (Wilson 1992).

Seed bank: Seeds can remain viable in the soil for 5 or

more years.

Dispersal: No information available.

Hybridization: No information available.

Management

Biocontrol: None.

Mechanical: Properly timed cultivation (Wilson 1992), beginning as soon as the crop emerges and continuing until it begins to close the row, can provide up to 95% management (Wilson 1992).

Fire: No information available.

Herbicides: In non-crop situations glyphosate will provide excellent management (Wilson 1992). Numerous herbicides are registered for pre-plant, pre-emergence, and post-emergence control in annual crops in Canada. Consult the most recent edition of BC Ministry of Agriculture, Food and Fisheries Crop Production Guides for specific recommendations.

Before applying herbicides, read the label for full use and precautionary instructions.

Cultural/Preventive: Always select clean, high-quality, certified seed. Clean farm equipment, especially combines, before leaving an infested field (Wilson 1992). Crop rotation can be used to manage wild proso millet. Alfalfa has been used for long-term management. Regular mowing prevents seed production (Wilson 1992).

Integrated Management Summary

Combining early season cultivation with either pre-planting or post-emergence herbicides has resulted in the most consistent control (Wilson 1992).

References

Wilson, R. G. 1992. Wild proso millet. NebGuide G83-648-A. Cooperative Extension, University of Nebraska Institute of Agriculture and Natural Resources. <http://ianrwww.unl.edu/pubs/weeds/g648.htm> [5 Mar 99].

Whitson, T. D. (ed.), L. C. Burrill, S. A. Dewey, D. W. Cudney, B. E. Nelson, R. D. Lee, R. Parker. 1996. Wild-proso millet. *Weeds of the West*. Western Society of Weed Science, in cooperation with the Western United States Land Grant Universities Cooperative Extension Services, Newark, CA.

