

YELLOW NUTSEdge

Cyperus esculentus L. var. *leptostachyus* Boeckl.

Family: *Cyperaceae* (Sedge).

Other Scientific Names: None.

Other Common Names: Yellow nut-grass, chufa, chufa flatsedge, galingale.

Legal Status: Provincial Noxious.



Identification

Growth form: Perennial or annual sedge.

Flower: Flowers are yellowish brown in appearance. Three to 9 leaf-like bracts under the flower clusters are longer than the flowers.

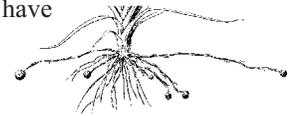
Seeds/Fruit: Seeds are yellowish, triangular, oblong, and 1–2 mm long.

Leaves: Grass-like leaves originate from the base of each stem, while long, leaf-like bracts radiate out from a common point just below the umbrella-like flower cluster.

Stems: Plants range from 10 to 70 cm tall, with 3-ranked leaves and 3-angled pithy stems.



Roots: Long, scaly rhizomes have small tubers at the tips that are dark, unevenly globe-shaped, and edible, tasting something like almonds.



Seedling: Stems are triangular in cross-section. Leaves are smooth, hairless, and deeply keeled. The plant is yellowish to pale green (Carey et al. 1993).

Other: The leaves have a sweet scent.

Similar Species

Exotics: Purple nutsedge (*Cyperus rotundus*) is very similar in appearance, but it has a purple seed head, its tubers are bitter, and its leaves taper to an abrupt point rather than a gradual one as in yellow nutsedge.

Natives: None known.

Impacts

Agricultural: The nutsedges are difficult weeds to manage in cultivated fields, often forming a solid cover over large areas in sorghum and alfalfa pastures, flood plains, dams, and ditches, and along streams and roadsides (Parker 1972). Yellow nutsedge can also be troublesome in crops like onions, potatoes, beans, and corn (Whitson et al. 1996). It reduces yield and quality by competing for light, water, and nutrients, and by

interfering with pesticide applications and harvest operations (Ackley et al. 1996). It is increasing as a concern to berry production in BC.

Ecological: Yellow nutsedge is a noxious weed of wet soil. Infestations often start in wet areas and then spread outward.

Human: No information available.

Habitat and Ecology

General requirements: Yellow nutsedge is found in many soil types but is common on well-drained, sandy soils or damp to wet sites. It can commonly be found in irrigated crops, along streams, around lakes and ponds, wet fields, and wet prairies.

Distribution: In BC, this plant is causing concern in coastal agricultural areas, where it grows on moist to

moderately dry sites. It is found only in the Mainland agricultural reporting region, where it is considered a major concern. It is also found in cultivated agricultural lands, turfgrass, nurseries, and native habitats in eastern Canada and throughout the US.

Historical: Introduced from Europe. The tubers are edible by humans and wildlife.

Life cycle: Plants are yellowish green. Flowers appear one per scale, with many scales per spikelet (USDA. Undated). Flowering occurs from July to October.

Mode of reproduction: By rhizomes, tubers, and sometimes seed. Rhizomes radiate from the main plant, ending in bulbs or tubers that may produce new plants.

Seed production: Under favourable conditions large amounts of seed can be produced (Holm et al. 1991).

Seed bank: No information available.

Dispersal: No information available.

Hybridization: No information available.

Management

Biocontrol: None.

Mechanical: May be pulled or dug before seed production. It is important to pull the entire root system to avoid regrowth from underground root buds.

Fire: No information available.

Herbicides: Very difficult to gain long-term control with herbicides. Bentazon is registered for control in blueberries. Non-selective control is possible with repeat glyphosate applications. 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: Prevent the establishment of new infestations by minimizing disturbance and dispersal and maintaining perennial plant communities.

Integrated Management Summary

Mechanical and/or chemical management methods can be used to eliminate seed production and deplete the nutrient root reserves. Land use practices that maintain perennial plant cover will help prevent the spread of yellow nutsedge. Management efforts must be directed at prevention of tuber formation.

References

Ackley, J. A., H. P. Wilson, and T. E. Hines. 1996. Yellow nutsedge (*Cyperus esculentus*) manage POST with acetolactate synthase-inhibiting herbicides. *Weed Technology* 10: 576–580.

Carey, J. B., J. J. Kells, and K. A. Renner. 1993. Common weed seedlings of Michigan. Department of Crop and Soil Sciences, Michigan State University Extension. Bulletin E-1363. <http://www.msue.msu.edu/msue/iac/e1363/e1363.htm> [27 Oct 99].

Douglas, G. W., D. Meidinger, and J. Pojar, eds. 2001. *Illustrated Flora of British Columbia*. Vol. 6. *Monocotyledons (Acoraceae through Najadaceae)*. Province of British Columbia.

Holm, L. G., D. L. Plucknett, J. V. Pancho, J. P. Herberger. 1991. *The World's Worst Weeds*. Malabar, FL: Krieger Publishing Co.

Parker, K. F. 1972. Yellow nutsedge—*Cyperus esculentus* L. An Illustrated Guide to Arizona Weeds. Tucson: University of Arizona Press. <http://www.uapress.arizona.edu/online.bks/weeds/yellownut.htm> [10 Sept 99].

US Department of Agriculture. Undated. *Midwestern Wetland Flora: Field Office Guide to Plant Species*. USDA. Soil Conservation Service, Midwest National Technical Center, Lincoln, NB. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page. <http://www.npwrc.usgs.gov/resource/othrdata/plntguid/plntguid.htm> [16 Jul 97].

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

