



# University of Maine Cooperative Extension

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## Weed Management References

Aldrich, R.J. 1984. Weed-Crop Ecology: Principles in Weed Management. Belmont CA: Breton Publishers. 465 pages.

Provides an ecological perspective on weed management.

Cocannouer, J.A. 1964. Weeds: Guardians of the Soil. New York: Devin-Adair. 179 pages.

Contains observations of the positive roles weeds play in improving soils. Based on several decades of study of weed behavior.

Fischer, B.B., A.H. Lange, J. McCaskill, B. Crampton and B. Tabraham. 1978. Grower's Weed Identification Handbook. Oakland: University of California Cooperative Extension (Publication 1030). 250 pages. Available from ANR Publications, University of California, 6701 San Pablo Avenue, Oakland CA 94608-1239.

Color photos of seed, seedling and flowering stages of over 240 species of weeds.

Green, J. 1982. "Complementary Field Plantings: Grass and Nursery Plants." *Ornamentals Northwest Newsletter* 6(3):8-9. Available from Horticulture Department, Oregon State University, Corvallis OR 97331.

Practical advice on the use of sod aisles and other techniques.

Isely, D. 1960. Weed Identification and Control. Ames IA: Iowa State University Press. 400 pages.

Excellent key to weeds of the U.S.

Muenschler, W.C. 1980. Weeds. Ithaca NY: Cornell University Press. 586 pages.

Key and descriptions for over 570 weeds of the U.S. and Canada.

Subcommittee on Standardization of Common and Botanical Names of Weeds. 1989. Composite List of Weeds. 112 pages. Available from the Weed Science Society of America, 309 W. Clark Street, Champaign IL 61820.

Useful standardized list of weed names.

Weed Identification Guide. 1991. Published by Agriculture Canada. Available from Nova Scotia Department of Agriculture and Marketing.

Excellent color photos of weeds make identification easy.



## Weeds as Indicators of Stress Conditions

Some weeds are especially competitive under certain environmental conditions. Correct identification of weeds is important not only for the purpose of selecting an appropriate control method, but also because the weeds may indicate environmental conditions which should be corrected for the benefit of the crop.

<u>Weed</u>	<u>Condition indicated by the weed's presence</u>
Black medic	Drought, low soil fertility
Chickweed	Excessive moisture
Crabgrass	Compaction, low fertility, drought, hot spot
Dandelion	Low fertility, drought
Dock	Excessive moisture
Ground ivy	Excessive moisture and shade
Knotweed	Compaction, drought
Lambsquarters	Disturbed soil
Moss	Low fertility, poor drainage, drought, low pH, compaction
Pigweed	Bare droughty soil, compaction
Plantain	Low fertility
Purslane	Excessive fertilizer
Red sorrel	Low fertility, poor drainage, low pH
Thistles	Low fertility, drought, heavy clay compaction
Yarrow	Low fertility
Yellow nutsedge	Excessive moisture

## Plants That Show Allelopathic Effects on Weeds

Some plants compete by producing toxic substances that slow the growth of other plants. This is known as allelopathy. Generally, the allelopathic plant releases a poisonous substance which vaporizes into the air, or leaches into the soil, or exudes from the roots. Seeds and nearby plants of susceptible species are stunted or killed after contact.

<u>Allelopathic plant</u>	<u>Weeds affected</u>
Barley	Ragweed, Redroot pigweed, Purslane, Foxtail
Cereal ryegrass	Green foxtail, Redroot pigweed, Purslane, Ragweed
Oats	Redroot pigweed, Barnyardgrass
Tall fescue	Crabgrass
Wheat	Ragweed, Redroot pigweed, Purslane, Foxtail