

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

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CEREAL PLANT IDENTIFICATION IN VEGETATIVE STAGE

The attached Western Regional Conservation Agronomy Note No. 29, dated March 1968 was prepared by Frank L. Brooks, Jr., Regional Agronomist, using line drawings prepared by Beecher Crampton, Agronomy Department, University of California, Davis.

Seedings of the four illustrated cereals are common enough throughout California to make a knowledge of the distinguishing characteristics useful to conservationists and technicians working with grain, forage, and cover crops.

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State Conservation Agronomist

Attachment

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WEST REGIONAL TECHNICAL SERVICE CENTER - PORTLAND, OREGON

CONSERVATION AGRONOMY NOTE NO. 29

F. L. BROOKS, JR., REGIONAL AGRONOMIST

March 1968

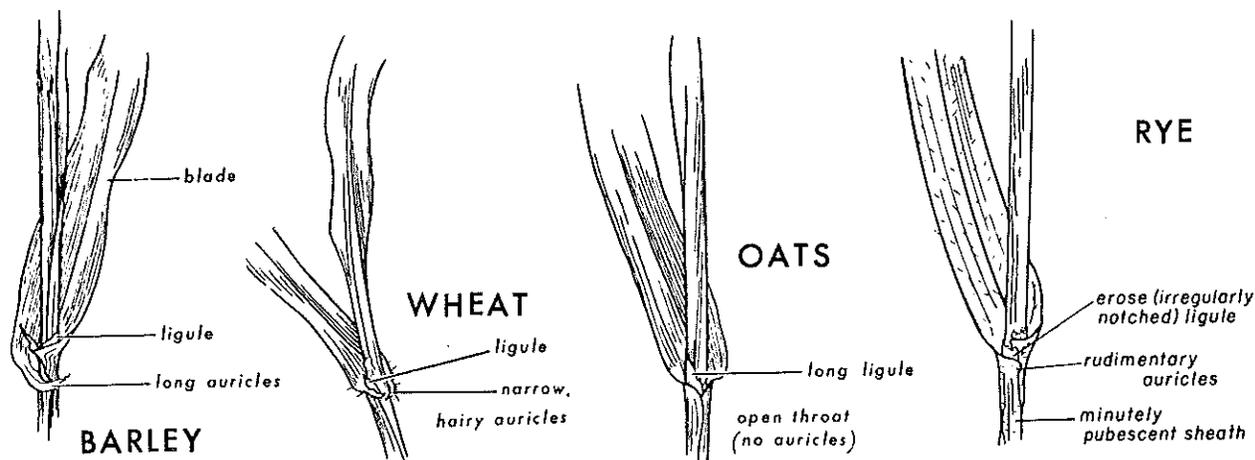
CEREAL PLANT IDENTIFICATION IN VEGETATIVE STAGE

It is often desirable to identify cereal plants before they produce seed heads. This is possible with a reasonable degree of accuracy by the examination of certain distinguishing characteristics of the leaves and stems.

Definitions:

Auricles - ear-like lobes or lateral extensions of the leaf collar, which is the thickened, hinge-like part of the leaf serving as a joint between leaf blade and leaf sheath. Auricles occur in pairs and project around the stem.

Ligule - a thin appendage on the upper and inner side of the leaf blade where it joins the leaf sheath.



Distinguishing Characteristics in the Vegetative Stage

Barley has long, smooth, clasping auricles and a small ligule.

Wheat has short, narrow, hairy auricles and a ligule which is prominent but shorter than that of oats.

Oats have no auricles (the sheath has an open throat) and a long ligule.

Rye has rudimentary auricles and a small ligule which is irregularly notched. Sheath and leaf blade are minutely pubescent.

Credit is given to Beecher Crampton, Agronomy Department, University of California, Davis, for line drawings of barley, wheat, and oat plants.