



# Crop Science Report

RESEARCH/EXTENSION

## Highland Bent - *Agrostis tenuis*\*

### Economic Importance:

Highland bent is a creeping form of Colonial bent. It is found growing native in relatively pure stands in western Oregon, especially in the Willamette Valley. It is adapted to soil types of medium to high elevations with moderately dry soil. Highland bent is used for meadow, forage, pasture, and turf purposes. It is an important ingredient for pasture and range mixtures for seedings on logged-off and burned-over forest land of western Oregon. Highland bent is an excellent grass for lawns, playgrounds, athletic fields, and putting greens because of its strong rhizomic habits and green, non-fading color throughout the year in the northwest. Precaution should be used in planting Highland bent adjacent to gardens where it may escape into the cultivated area.

### Vegetative Characteristics:

Highland bent usually grows erect with robust culms, ranging in height from 15 to 60 cm. (Plate VIII). It spreads vegetatively by strong rhizomes. The leaves are rolled in the bud. The blades are usually 4 to 10 cm. long, and 1 to 3 mm. wide, gradually tapering, and of a medium to dark green color. The sheath is glabrous, round and light to medium green in color. The collar is glabrous and distinct. Auricles are absent. The ligule is membranous, thin, 1 to 3.5 mm. long, round to obtuse in shape, finely toothed and often split. The panicle varies from 6 to 15 cm in length, with an open pyramidal form. The branches arise at a smaller angle from the rachis as compared to Redtop. The seeds of Highland bent are long and slender, and tapering to the ends. The apex of the lemma is commonly truncate, with veins often exerted (usually 3) and tend to be twisted or folded. The lemma is constricted above the callus. The callus hairs are few and small. The palea is slightly shorter than the caryopsis, slender and stiff-like in form, with a deep V-shaped apical notch. The caryopsis is spindle-shaped, dark in color, with a short linear hilum.

\*From thesis: Hansen, LeRoy R. An Ecological and Taxonomic Study of the Root Development and the Vegetative Characters of Certain Economic Bent Grasses, *Agrostis* Species. MS Thesis. 1939. Oregon State College

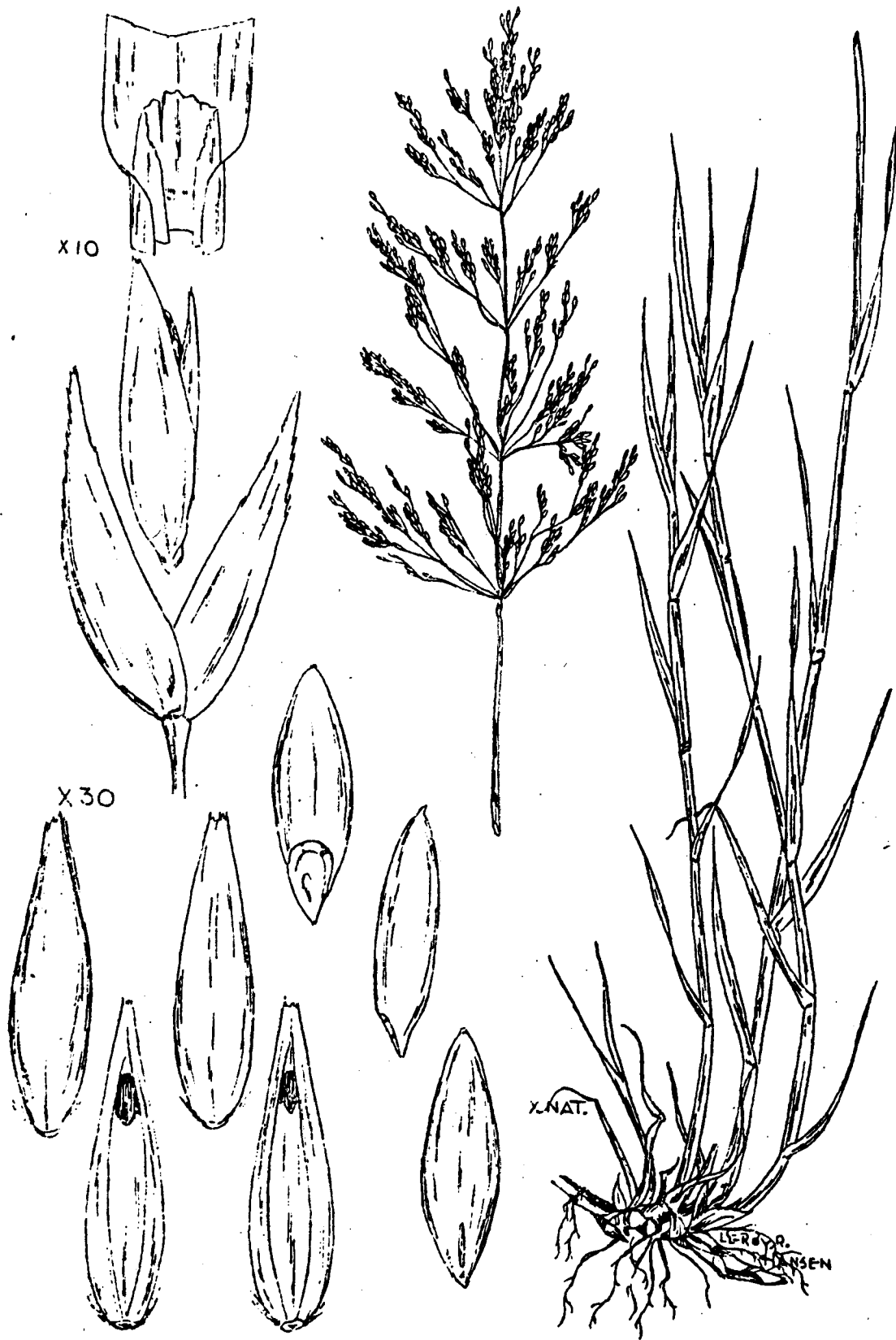


Plate VIII. Highland Bent Grass (Agrostis tenuis var. oregonensis). Plant x Nat., ligule x 10, spikelet, floret, and caryopsis x 30.