Oregon State University

Crop Science Report
RESEARCH/EXTENSION

Seaside Bent - Agrostis palustris*

Economic Importance:

Seaside bent (Agrostis palustris, formerly called A. maritima Lam.) is grown abundantly in the tidal basins of Coos, Douglas, Lane and Lincoln Counties of western Oregon and in Klamath County in eastern Oregon. It is found growing in the marshes along the coast from British Columbia to California and Newfoundland to Maryland. Agrostis palustris has been introduced in many sections of south central Canada, the Great Lakes states and in some of the southern states, mainly New Mexico and Arizona.

Seaside bent is a desirable lawn and turf grass because of its strong stoloniferous habit, prostrate form, and fine vegetative characteristics. An objection to its use in lawns and turfs is that the color fades to a light yellow-green during the moist winter months of the northwest. This grass is adapted to low, moist and marshy soil types and is quite tolerant to salinity. Seaside bent is an important ingredient of grass mixtures for low, moist, and somewhat saline soils of both eastern and western Oregon, because it rapidly forms vegetative cover. Dairy farmers along the coast use this grass for pasture and forage purposes.

Vegetative Characteristics:

Seaside bent is a prostrate, low-growing perennial grass, having numerous long stolons that spread along the ground surface, branching and rooting profusely at the nodes. (Plate V). The culms range in length from 2 to 12 cm. The leaves are rolled in the bud and the blades are 1.5 to 4 mm. wide, 3 to 10 cm. long, erect, flat, tapering, distinctly ridged on the upper surface, slightly keeled on the lower surface, scabrous on the margins and surface, and light to medium green in color. The sheath is glabrous, not keeled or compressed, pale green to purplish in color, shorter than or equal to the internodes of the vegetative shoot in length, and split with hyaline margins. The collar is distinct, oblique, glabrous,

*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

and pale green in color. Auricles are absent. The ligule is membranous, thin, 1.5 to 4 mm. in length (similar to Redtop), rounded to obtuse, finely lacerate-toothed, entire or split. The panicle is from 2 to 6 cm. in length, and of a condensed form, opening at blooming season and then closing for the remainder of the season. The seeds are lanceolate to elliptical in shape. The lemmas have a slight luster, usually lighter in color than Redtop, five-veined apex predominating occasionally possess a short awn above the middle midvein commonly exerted at the apex, back usually keeled above callus, and commonly angled or constricted in "waist" like manner above the callus. The palea is sometimes short and broad, the usual longer palea forms a tapering, with the apex being obtuse, rounded or entire. The callus hairs are very short and appressed. The callus has a "stuck-on" appearance. The hilum is short-linear and sometimes is broad, forming a wedge-like shape.

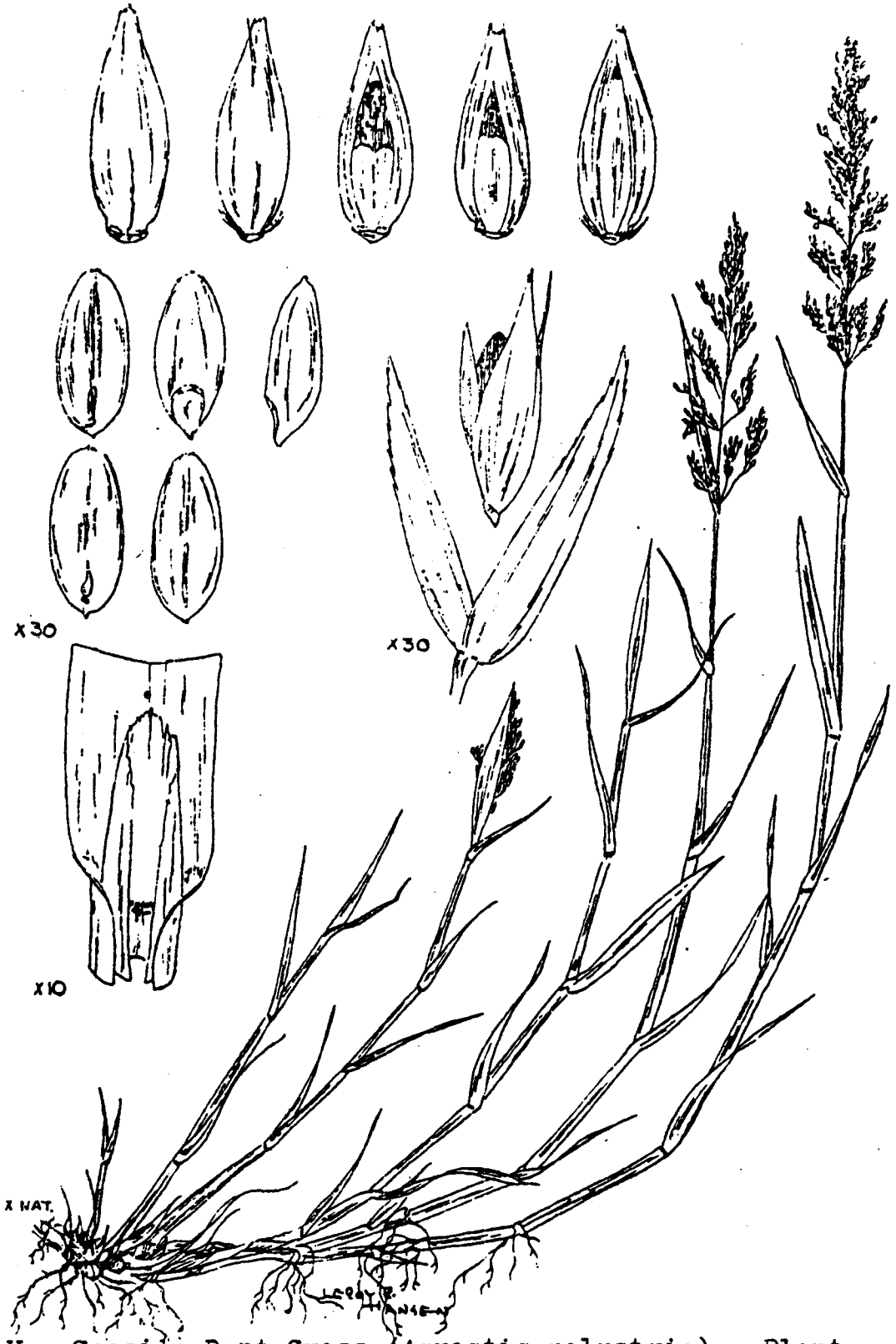

Plate V. Seaside Bent Grass (Agrostis palustris). Plant x Nat., ligule x 10, spikelet, floret, and caryopsis x 30.