



Oats, Wheat and Canola in Alaska

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Oats

Oats are second in importance to barley as a cereal crop adapted to Alaska growing conditions. Although oats require 7 - 10 days more to mature and ripen than barley, they can be harvested green as a forage or hay crop. Oats are grown primarily for livestock feed. The straw is also in high demand for animal bedding since it does not have the rough awns (beards) that barley or wheat straw contain. Two of the best adapted varieties are 'Nip' and 'Toral'. Nip is a black-hulled, very early maturing variety developed in Sweden in the late 1950s. Toral is a yellow-hulled, early maturing variety developed by the USDA Agricultural Research Service at the Palmer, Alaska Experiment Station in the early 1970s. Average yield per acre ranges from 111 to 123 bushels for Nip oats and 122 - 134 bushels for Toral oats.

Wheat

Three major types of wheat have been grown in Alaska: hard red spring wheat, winter wheat and durum wheat. Winter wheat cultivars frequently have poor winter survival and result in poor yields. Durum wheat varieties require a longer growing season than exists in Alaska and often fail to mature and ripen. Varieties of hard red spring wheat (bread wheat) have shown the best adaptation to the Alaska climate. Hard red spring wheat requires an additional 10 - 15 days to mature and ripen for grain than barley and is a marginal crop in years with early frosts. Four of the best varieties are 'Chena', 'Gasser', 'Nogal', and 'Ingal'. The early-maturing variety Chena was developed in Finland in 1970. Gasser is named after the late Dr. George W. Gasser, agronomist and former Commissioner of Agriculture for Alaska. It is an early-maturing variety developed by the USDA at the Palmer, Alaska Experiment Station in 1955. Ingal and Nogal also resulted from the breeding program in Palmer and were released in 1981. All of these varieties have excellent breadmaking qualities. The average yield in bushels per acre are: Chena, 46 - 73; Gasser, 38 - 55; and Ingal - 44 - 61.

Canola (rapeseed)

Canola is a high quality edible oilseed crop. It contains 43% oil and 57% meal for animal feed. Unlike some other members of the *Brassica* species, canola is not affected by the long daylength of Alaska summers, thus it flowers abundantly and produces seeds. The main problem experienced in Alaska has been uneven ripening of the seeds resulting in a high percentage of green seeds at harvest. These green seeds add an unacceptable green tint to the processed oil. The primary goal of current research is to reduce this percentage of green seeds. The most popular variety for Alaska is 'Tobin', an early maturing, Polish type rapeseed developed in Canada. Yields average 25 - 35 bushels per acre.

