REGISTRATION OF CROP CULTIVARS

REGISTRATION OF ‘JASPER’ OAT

‘JASPER’ spring oat (Avena sativa L.) (Reg. no. 317) (PI 495868) was developed at the Agriculture Canada Research Station, Lacombe, Alberta, Canada, from a cross made in 1975 between ‘Cavell’(1) and ‘Gemini’(2). The F₁ and F₂ generations of this cross were grown in the field. The F₃ through F₆ generations were advanced in growth cabinets by single seed descent. Jasper was selected in 1979 from approximately 650 F₆ lines grown in a panicle-row nursery at Lacombe, Alberta. Jasper was tested as selection no. LA-393-29 in the Preliminary Yield Test in 1980, and in the Project Oat Test in 1981. Jasper was advanced to the Western Co-operative Oat Test in 1982 and tested for 3 yr under the experimental designation OT740. License no. 2551 for this cultivar was issued by the Plant Health and Plant Products Directorate, Agriculture Canada, on 30 Sept. 1985.

Juvenile plants of Jasper are erect. Adult plants are medium tall with medium thick and medium strong culms. Culm internodes are glabrous. The flag leaf is relatively erect. The penultimate leaf blades are generally drooping. Leaf blades are medium in width and leaf margins and sheaths are glabrous. A ligule is present at the base of the flag leaf.

The panicles are equilateral, erect, medium wide, medium long, ovate, and intermediate in density. The rachis is straight to slightly flexuous. The rachillas are mid-long and glabrous. The spikelets are drooping and produce one or two florets. The lemmas are pointed, medium in length, and produce a few awns. Spikelet separation is by fracture, and floret separation is by disarticulation. The kernels are mid-wide, mid-long, yellow in color, and most fluoresce light blue under ultraviolet light.

In Alberta, Jasper has yielded more than any cultivar in its maturity group. In 2 yr of province-wide testing in Alberta (48 station yr), Jasper yielded 6% more than ‘Athabasca’ and matured in about the same number of days as Athabasca. Athabasca is the earliest maturing cultivar currently available to producers in Alberta. In comparison to other cultivars commonly grown in the province, Jasper yielded equal to or better than ‘Grizzly’, ‘Harmon’, and ‘Random’, and produced about 8% less grain than ‘Calibre’ or ‘Cascade’. The latter two cultivars matured 3 to 5 days later than Jasper, which may have contributed to their yield advantage.

Jasper is intermediate in plant height and averages about 6 cm taller than ‘Dumont’. Jasper is equal to Dumont and ‘Rodney’ and slightly lower than Cascade in lodging resistance. It has good sprouting tolerance, high test weight, low kernel plumpness. Jasper is recommended for production in central and northern Alberta, where early maturity, high yield, and nonbranching with straight internodes. It is moderately resistant to powdery mildew. Jasper has been contracted to SeCan Association, Suite 512, 885 Meadowlands Drive, Ottawa, Ontario K2J 7Y9, Canada.

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References and Notes


REGISTRATION OF ‘ALASKA 81’ AND ‘UMATILLA’ DRY PEA

‘ALASKA 81’ (Reg. no. 13) (PI 508092) and ‘UMATILLA’ (Reg. no. 14) (PI 508093) dry pea (Pisum sativum L.) were developed cooperatively by the USDA-ARS and the Washington State University. They were released in 1984 and 1986, respectively.

Alaska 81 (PS 81034) is an F₄ derived line from a backcross of ‘Campbells Scotch’ (2) with Wis 7105. Alaska 81 is an F₄ derived line from a backcross of ‘Campbells Scotch’ (2) with Wis 7105. Alaska 81 is immune to pea seedborne mosaic virus. Alaska 81 has been tested at the northern Idaho.

Alaska 81 was tested as PS 81034 in eastern Washington and northern Idaho beginning in 1981 and in Pacific Northwest Regional Nurseries beginning in 1983. When all trials were combined, Alaska 81 was 33% higher than Alaska.

Alaska 81 is a field pea type that grows about 6 cm taller than Alaska. The vine habit of Alaska 81 is indeterminate and nonbranching with straight internodes. Leaves are medium green and slightly marbled with medium width. They have two leaflet pairs. The stipules are normal and slightly marbled. The flowers are white and usually borne singly or doubly on the peduncles. Pods are smooth, round, and smooth with green cotyledons.