

NEBRASKA AGRICULTURAL EXPERIMENT STATION  
UNIVERSITY OF NEBRASKA-LINCOLN  
DEPARTMENT OF AGRONOMY

RELEASE OF EARLYBIRD (P.I. 56XXXX) PROSO

The Nebraska Agricultural Experiment Station agrees to release a new proso variety to certified growers. P.I. 56XXXX, also known as NE87041, will be released as 'Earlybird'. Earlybird was developed by the Nebraska Agricultural Experiment Station.

Earlybird is an increase of a white proso F<sub>3</sub> derived F<sub>4</sub> line from the cross Minco/NE76010//Rise/NE79017. NE760101 was a selection from Dawn/Panhandle and NE79017 was a selection from Dawn/NE760101. Earlybird was identified as a line in 1988, tested in preliminary trials in 1988 - 1990, and in regional trials in 1991 and 1992.

Earlybird has a white seed coat(lemma and palea) and a compactum (closed) type panicle. The foliage is green in color and is similar to 'Sunup'. Cool growing conditions increase the incidence of red pigmentation in the foliage.

Yield potential of Earlybird has been similar to Sunup, 6% more than 'Rise', and 41% more than 'Dawn'. Relative yield is expected to be better than other cultivars when growing season is limited by cropping system, climate or other reasons. Earlybird is intermediate in maturity between Dawn and Sunup.

Seed size of Earlybird (684 seeds per 5 g) is larger than all previously released cultivars. It has averaged 4% larger in seed size compared to Dawn, 6% larger than Sunup and 'Snowbird', 7% larger than 'Panhandle', 'Minco' and 'Cope', and 9% larger than 'Rise'.

Grain volume weight of Earlybird (719 gl<sup>-1</sup>) has not been shown to be significantly different from other proso cultivars, but has tended to be slightly less than Sunup (724 gl<sup>-1</sup>). The straw strength of Earlybird is similar to Sunup and better than other cultivars with similar plant height. It has been less susceptible to lodging than Panhandle, Cope, 'Abarr', or Snowbird. Earlybird is intermediate between Rise and Dawn in plant height and averages 10 cm less than Sunup. Earlybird has shown no susceptibility to Russian wheat aphid. No observations have been made of relative resistance to other insects or disease.

Breeder seed of Earlybird will be maintained by the Nebraska Agricultural Experiment Station. Foundation seed can be obtained from the Nebraska Foundation Seed Division, Department of Agronomy, University of Nebraska-Lincoln. The seed classes will be breeder, foundation, registered, and certified. Earlybird will not be submitted for plant variety protection.

Approval

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Director, Nebraska Agricultural Experiment Station

1994

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Date