

REGISTRATION OF CROP CULTIVARS

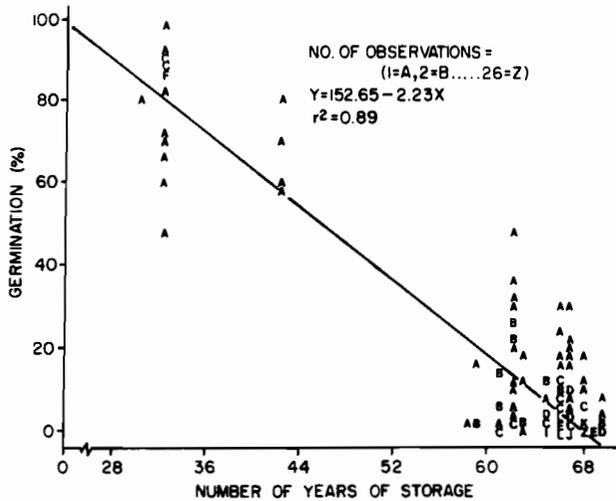


Fig. 1. Relationship of percent germination of 212 samples of *M. sativa* seed to the number of years they were stored under uncontrolled temperature and humidity at Belle Fourche, SD and Mandan, ND.

nation of 27.5%. *Medicago sativa* had a mean germination of only 4.5%, and a mean of 0.8% hard seeds. Within each species, only nonsignificant correlations were obtained between percentage of hard seeds and percentage of germination: $r = 0.58$ for *M. sativa* and $r = 0.02$ for *M. falcata*. Because we wished to

avoid germinating this seed unless it was to be used, further testing was precluded.

Plants and seeds are being sent to the Plant Introduction Station at Ames, Iowa. Some seed lots will be sent to the National Seed Storage Laboratory, USDA, Fort Collins, Colo.

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Registration of Crop Cultivars

REGISTRATION OF COPE PROSO MILLET¹

(Reg. No. 51)

Greg Hinze, H. O. Mann, Edward J. Langin, and Adrian Fisher²

'COPE' proso millet (*Panicum miliaceum* L.) is a selection made from a commercial field of "common white proso." Common white is a widely grown, well-adapted, land cultivar of heterogeneous types.

In comparison to 'Abarr' proso, or to the general population of common white proso, Cope is 10 to 14 days later in maturity, thus is considered to be of medium maturity. Seeds are large for the species and white in color.

Cope is not pure for head type and will have both *contractum* and *effusum* types of panicles. Plants are upright, stalk strength is good, and tillers tend to grow upright and approximate the main panicles in height. Plants will grow 25-35% taller than those of Abarr.

Yields of grain have exceeded those of Abarr by over 30% in eastern Colorado on the average. This is equivalent to 545 kg/ha (490 lb/A or 8.7 bu/A).

The increase of Cope is limited to one generation each of foundation, registered, and certified seed. Breeder seed will be maintained by the Dep. of Agronomy, Colorado State Univ., Fort Collins, CO 80523. Cope was released to foundation seed growers in 1978.

¹ Registered by the Crop Sci. Soc. Am. Supported by the Colorado State Univ. Exp. Stn. and published as Scientific Paper no. 2337. Accepted 8 May 1978.

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REGISTRATION OF MENOMINEE OAT¹

(Reg. No. 291)

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'MENOMINEE' spring oat (*Avena sativa* L.), CI 9263, was developed at the Michigan State Univ. Agric. Exp. Stn. and released in the spring of 1977. Prior to its release it was tested as MI 64-151-123. It originated from the cross 'Coachman'/'Marino' and has been tested 2 years in the Uniform Midseason Oat Nursery and 10 years in Michigan.

The new cultivar has field resistance to red leaf (barley yellow dwarf virus) and to Septoria black stem (*Leptosphaeria avenaria* G. F. Weber), the most important diseases of oats in Michigan. It has resistance to races 202, 264B and 325 of leaf rust (*Puccinia coronata* Cda. var. *avenae* Fraser and Led.) and is susceptible to races 264A, 239 and 326. Menominee has resistance to race 35 of stem rust (*P. graminis* Pers. f. sp. *avenae* Eriks and E. Henn.) but is susceptible to races 31 and 87, as are most cultivars of the region. Under field tests, Menominee should be classed as moderately susceptible to both rust diseases. These two diseases have not been economic factors in the last two decades in Michigan, although the possibility always exists of an epiphytotic. Menominee is susceptible to smut (*Ustilago avenae* (Pers.) Rostr.).

Menominee has the best yield record of any cultivar tested in Michigan. It has been consistently good in the Upper Peninsula and its release is intended primarily for that region. It is a medium tall, late, white oat with a good test weight. In comparison with a standard variety, 'Korwood', CI 9167, it is about 2 days later in heading and has about the same height and test weight. It is less lodging resistant than Korwood, being about equal to 'Garry' in this respect.

¹ Registered by the Crop Sci. Soc. Am. Accepted 22 May 1978.

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