Montana-5 grain amaranth is a single-plant selection from RRC-425 of the germplasm collection of the Rodale Research Center (RRC) at Kutztown, PA (1). Its origin is Morrel's, Huazulco, Mexico. It is of the Mexican grain type of *amaranth*, which has green flowers, white seed and a main central panicle with erect to drooping, finger-like branches. To date, the Mexican grain types have been the most popular cultivars tested for grain production.

Montana-5 was selected as a single plant from an access-screening nursery of 213 entries of the Rodale germplasm collection, planted in 1983 at Huntley, MT (2). Montana-5 was among six plants in this nursery that showed early dry-down of stems and leaves with respect to grain maturation. Their progenies were planted in 1985. The RRC-425 single-plant progeny showed uniform early dry-down before killing frost, which is evidence for genetic inheritance of this trait. Three other dry-down plant progenies showed lush green growth at the time of seed maturation.

Early dry-down or vegetative desiccation is a desirable characteristic in grain amaranth. In cereal grains like wheat, maize, and oats, often the entire plant dries down at the same time the seed head dries. In contrast to cereal grains, the stems and leaves of the amaranth plant often exhibit lush green growth at the time of seed maturation. Thus, these plant parts are still high in moisture at seed harvest, which can result in much of the seed adhering to the moist plant residue. These seeds are thus lost in the harvest process. The lack of early dry-down at maturity limits commercial amaranth production with presently available cultivars to areas with killing frost. Montana-5 will be of value to plant breeders who want to incorporate dry-down into their breeding material.

Small seed samples of Montana-5 are available on request and will be provided upon agreement to make appropriate recognition of their source a matter of record when the germplasm contributes to the development of new cultivars. Seed can be requested from Jurgen R. Schaeffer, Department of Plant and Soil Science, Montana State University, Bozeman, MT 59717-0002.


References and Notes


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REGISTRATION OF MONTANA-5 GRAIN AMARANTH GERMPLASM

REGISTRATION OF GPP4BR(H)C5 ACID-SOIL-TOLERANT SORGHUM GERMPLASM POPULATION

The *Sorghum bicolor* (L.) Moench acid-soil-tolerant random-mated germplasm population, GPP4BR(H)C5 (Reg. no. GP-234; PI 531231) was synthesized at the University