'ARS-2620' BIRDSFOOT TREFOIL

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'ARS-2620' birdsfoot trefoil (*Lotus corniculatus* L.) was released by the USDA-ARS in cooperation with the Missouri Agricultural Experiment Station in March 1995. ARS-2620 is the first birdsfoot trefoil cultivar that exhibits rhizomes that may increase persistence under pasture, range, and other uses.

ARS-2620 was developed from the mating of five wild germplasm accessions (G31272, G31273, G31276, G31298, and G31317) from Morocco with ' Norcen' and 'AU Dewey' and germplasm MU-81. The five Moroccan accessions are unique among *L. corniculatus* in that they possess rhizomes. Hybrids were verified using RAPD analysis. The F_1 progeny were field evaluated for rhizome production, vigor, dry matter production, forage quality, incidence of Rhizoctonia foliar blight (caused by (*Rhizoctonia solani* Keuhn), seed production, and winterhardiness. All F_1 progeny exhibited the rhizome trait.

Forty-seven F_1 progeny were selected for best combinations of traits and vegetatively-propagated to produce 25 ramets of each selected progeny. The ramets were transplanted at Corvallis, OR open-pollinated seed production in isolation. Equal numbers of seed collected from each plant constituted the Syn 1 (Breeder) seed lot of ARS-2620.

ARS-2620 is similar to its commercial parents, Norcen and AU Dewey, but more variable in morphology, like MU-81. It is semierect, with small- to medium-sized leaves and fine- to medium-sized stems. It contains a larger number of early-flowering plants than Norcen or AU Dewey. ARS-2620 easily distinguished from other cultivars by its rhizomes production. However, the expression of rhizomes may not be found in every plant of ARS-2620 as rhizome production can be influenced by management practices, edaphic conditions, and other factors. Development of ARS-2620 was intended for pastures and open range, though it may be useful for revegetation of disturbed sites such as mine spoils, highway right-of-ways, and cut-over forests.

Genetic material of this release has been deposited in the National Plant Germplasm System where it is available for research purposes as PI 592503. Exclusive rights for production and marketing of ARS-2620 has been awarded by USDA-ARS on a competitive basis. Protection for ARS-2620 has been sought under the Plant Variety Protection Act of 1994.