THE UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
AND
MISSISSIPPI AGRICULTURE AND FORESTRY EXPERIMENT STATION
AND
DEPARTMENT OF WILDLIFE AND FISHERIES
MISSISSIPPI STATE UNIVERSITY

ANNOUNCE THE SELECTED CLASS RELEASE OF

Lark selection partridge pea

The United States Department of Agriculture, Natural Resources Conservation Service (NRCS), Mississippi Agriculture and Forestry Experiment Station and the Department of Wildlife and Fisheries Mississippi State, Mississippi announce the naming and release of Lark selection partridge pea [*Chamaecrista fasciculata* (Michx.) Greene].

Lark selection was assigned the NRCS accession number **9028375.** It was selected to provide an adapted partridge pea for use in critical area seeding mixtures for erosion control (Anonymous, **1963),** wildlife food and cover (Graham, **1941)** and beautification of roadsides (Timme, **1989)** in Arkansas, Louisiana, Mississippi, Alabama, and western Tennessee (mid-South region).

ORIGIN AND SITE DESCRIPTION: Seed of Lark selection was collected in **1982** by Hardy Cloutier and Steve Villines of the USDA-Soil Conservation Service. The original native stand was located near Highway **121,** approximately **5** miles northwest of the city of Marianna, Arkansas, in major land resource area **134** and plant hardiness zone 7 (USDA, **1990).** The collection site was **34° 49'** 50" north latitude and **90°** 50' **30"** west longitude in Section **36,** Township 3N, Range **2E** in Lee County. Soil is a Loring silt loam. The Loring series consists of moderately well drained, nearly level to moderately sloping upland soil formed from loess deposits (USDA, **1977).** Normal annual precipitation is 50 inches and elevation is **210** feet. The area has a seven month growing season extending from April to October. In addition to Lark partridge pea, other plants growing on this site were ragweed (Ambrosia *artemisiifolia* L.), johnsongrass [Sorghum *halepense* (L.) Pers.] and sesbania (*Sesbania* spp.). The name Lark selection was derived from the compilation of county and state names.

Seed was received by the USDA-NRCS, Jamie L. Whitten Plant Materials Center (PMC) near Coffeeville, Mississippi in **1982.** It was included with several other *Chamaecrista* spp. collections that were obtained from native stands throughout the mid-South. Seeds were planted in an initial evaluation planting at the PMC and in advanced evaluation plantings in Jackson, Mississippi. A production field was planted in **1995** at the Jamie L. Whitten PMC from seed increases of the original collection.

PLANT DESCRIPTION AND OCCURRENCE: Partridge pea is an erect or spreading native annual Warm season legume **1-3** feet tall with showy yellow flowers. Leaves are pinnately compound, usually with **10-15** pairs of leaflets. A small, dark, saucer-shaped nectary, or honey gland, is located on the leaf petiole on the lowest pair of leaflets. Seed pods are **less** than **3** inches long. It is adapted to medium to fine textured soils. Partridge pea occurs on low maintenance areas such as roadsides, field borders, abandoned cropland and open woodlands, and seed are readily eaten by game birds (Graham, **1941,** Radford et al., **1968).**

Lark selection does not vary from the general taxonomic description of partridge pea.

PLANT PERFORMANCE: Lark selection was among **16** accessions selected from **116 initial accessions of *Chamaecrista* spp. for ground** cover, vigor, seed production and hardiness **from evaluations** in **1981-85 (Wolfe** and Snider, **1987).** In **1989,** evaluations **continued on 14 of the 16** accessions for seed production and growth characteristics. **Lark selection and two other** accessions (9021855 Crawford County, AR; **9021660 Columbia County, AR) were found** to be superior in seed production, growth form, and **vigor (Wolfe, 1991). Lark selection** was selected for release because it ranked the **highest in the following categories: seed** weight, seed production, pod production and **flower production. It matures seed in late** fall making it available for quail over winter (Graham, **1941).**

RELEASE JUSTIFICATION: 'Comanche' partridge pea, a release from the USDA-NRCS, James **E.** "Bud" Smith PMC near Knox City, Texas, was included as the commercial standard for comparison in the initial evaluation planting at the PMC. 'Comanche' was satisfactory in comparative evaluations, but many of the mid-South ecotypes **were** superior. Furthermore, field plantings of 'Comanche' from **1979-86** at multiple locations throughout the mid-South revealed that it was marginally adapted when compared to local sources (USDA, **1987).**

Lark selection has proven to be a dependable seed producer in spite of extreme hot, droughty weather during peak flowering and seed set. It has also shown good reseeding ability with germination occurring from mid-April through early May.

PLANT ESTABLISHMENT: Lark selection should be planted on a firm, clean seedbed. Planting dates should be from March to April **15** for the mid-South. Production practices at the PMC include fertilizing fields at a rate of **300** lb/acre of 8-24-24. Seeding rate is **3** lb/acre in **40** inch rows. Broadcast rate is 5-6 lb/acre. Seed are scarified prior to planting and inoculated with EL inoculum. In subsequent years, natural reseeding will probably be adequate for sufficient stands. A light disking or other means of soil disturbance to expose mineral soil and to eliminate weed competition will improve chances of successful reseeding. In spite of its indeterminate seeding habit, seed yields of 200 lb/acre have been harvested at the PMC.

AVAILABILITY OF SEED: Generation **2** seed of **Lark** selection partridge pea is available **from the** USDA-NRCS Jamie **L.** Whitten Plant Materials Center, Rt. 2 **Box 21**5-A, **Coffeeville,** Mississippi **38922.** Tel.: **601-675-2588. FAX: 601-675-2369.**

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