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# VA-70 SHRUB LESPEDEZA

# (Lespedeza thunbergii)

#### **NRCS Conservation Practice Codes**

Conservation Cover (327), Field Border (386), Hedgerow Planting (422), Upland Wildlife Habitat Mgt. (645)

Primary Use: Wildlife Habitat

Secondary Use: Erosion Control



Land use changes associated with the colonization, industrialization, urbanization, and agricultural production over the past 200 years has dramatically altered the landscapes and ecosystems in North American. These changes have had profound impacts to suitable habitat for wildlife. Shrub lespedeza (*Lespedeza thunbergii*) was intended for wildlife. Its seed is used as food by bobwhite quail; deer and rabbit browse the leaves and bees make honey from its flowers. 'VA-70' is used to increase and diversify field edge habitat. It is used for borders, steep bank seeding along ditches and wildlife corridors along water courses.

#### **Varieties and Sources**

Two cultivars of shrub lespedeza have been developed and released to the commercial market by the USDA Natural Resources Conservation Service. 'VA-70' was selected for its wildlife value and cold hardiness by the Cape May Plant Materials Center, Cape May Court House, NJ. While, 'Amquail' was developed at the Americus Plant Materials Center in Georgia for its wildlife food and cover attributes for use in the southeastern U.S. The value of shrub lespedeza for wildlife improves when planted in conjunction with rows of warm season grasses such as switchgrass (*Panicum virgatum*), coastal panicgrass (Panicum amarulum), and/or Indiangrass (Sorghastrum nutans). Partridge pea (Chamaecrista fasciculata) is a valuable legume that could be added to any seed mixture

Plant Type: Small, semi-woody shrub.

#### **Description**

Shrub lespedeza is a non-native perennial legume that grows 4 to 6 feet tall. Stems may reach 1/2 inch in diameter and die back to the ground annually. Leaves are usually 2 inches long and 1/2 inch wide, with a more linear appearance than oval. The pink to purple colored flowers emerge in great masses during late summer. Bees and insects are necessary for pollination. This species of lespedeza easily hybridizes with others of the genus, so isolation is necessary. The small, black, bean-like seeds are produced in pods. Seed maturity occurs from late September to early October. Approximately 300 to 500 pounds of seed are produced per acre.

There are about 72,000 seeds per pound. This species has a high frequency of hard-coated seed which must be broken or removed to initiate germination.

#### Adaptation

Shrub lespedeza performs well on droughty, well drained, or somewhat poorly drained soils of variable texture. For seed to fully mature, a growing season no less than 160 days long is required.

### Establishment

Shrub lespedeza can be established with 1/0 seedlings, but direct seeding is the preferred method. Good site preparation is necessary and in midspring a weed free, firm, seedbed must be well worked for good seed establishment. To improve first year germination, the seed should be scarified by abrasion or acid and properly inoculated before planting. Soil pH should be adjusted to about 6.5 and NPK application according to Soil Test results. Moderate levels of P and K should be targeted.

#### Area of Adaptation



Seeding should occur from the date of last expected frost, to no later than June 1. If established with broadcasting techniques, 8 to 10 lbs./AC should be used on well worked soils; if drilled into rows, 6 to 8 Lbs./Ac. will be acceptable rates. When co-planting switchgrass with shrub lespedeza, add 5 to 7 pounds of grass seed to the rates listed above. Seed should be sown 1/2 to 1 inch deep depending on soil conditions. Sawdust, wood chips, hay, straw, or wood fiber mulching is effective at holding seed in place on highly erodible sites, and retaining moisture on droughty sites. Seedlings do not compete well with over-topping weed growth. Control is best attained by allowing weeds to grow to a height from 18 to 24 inches tall; then mow the weeds to a height equal to that of the lespedeza seedlings.

To establish shrub lespedeza in nursery beds, place 12 to 20 seeds, 1/4 to 1/2 inch deep, per linear foot of row; space rows 3 to 4 feet apart. Use the seeding recommendations stated above. Use normal tree planting procedures to establish these seedlings at 2 to 3 feet within the row and 3 to 4 feet between rows. This method is usually more expensive, but a good stand can be attained more quickly.

## Management

Shrub lespedeza is a legume, capable of fixing atmospheric nitrogen. Additional inorganic forms of N are not necessary. Cuttings plots at 2-3 year intervals will help maintain the rigor and wildlife habitat capacity of the planting. Stems should be cut no lower than 6"-8" from the ground.



VA-70 Lespedeza in production field

For more information about this and other conservation plants, contact your local NRCS field office or Conservation District.

Visit the Plant Materials Program at http:// Plant-Materials.nrcs.usda.gov

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