Silver River Annual Sweetclover

'Silver River' is a rust resistant cultivar of white-flowered, annual sweetclover (*Melilotus albus* Medik.) best adapted to south and central Texas. Sweetclover rust (*Uromyces striatus* Schroet.) causes a range of plant disease symptoms on common and Hubam annual sweetclover, including leaf drop, reduced seed and forage yield, and premature plant death. The breeding and evaluation of Silver River for rust resistance was conducted at Beeville, TX under severe epiphytotics of sweetclover rust. Two cycles of mass selection at Beeville were used to improve the rust resistance of a sweetclover plant introduction line from Uruguay. The original plant introduction population had 21% rust resistant plants. Silver River averaged 91% resistant plants at Beeville in 2014 and 2015, compared to 'Hubam' with a 2-year average of 7% resistance. Silver River is similar to Hubam in forage yield and maturity. This new cultivar will improve the reliability of annual sweetclover in cattle grazing systems and wildlife supplemental forage plantings in Texas. This new cultivar of sweetclover is best adapted to neutral and alkaline pH soils. Silver River was released by Texas A&M AgriLife Research in 2016 and was licensed to Amigos Genetics, Breckenridge, TX (800 722-8616). PVP was issued in 2019 (PVP#201799297). See registration article for more information (JPR Vol. 11 No. 2, p. 112-115).

Silver River Sweetclover Establishment, Management and Utilization.

Silver River is a reseeding, annual sweetclover that should be fall planted. Exact planting dates vary with region and with local weather conditions. Soils should be sampled and tested prior to planting and any nutrient deficiencies corrected. Nitrogen fertilizer is not required or recommended for this forage legume. Generally planting should occur between Sept. 1 and Nov. 1 and should correspond to the beginning of fall rain and a shift to cooler temperatures. Seed should be inoculated with Rhizobium inoculate specific for sweetclover or alfalfa and seed placement should be no deeper than one-half inch. Seed can be broadcast or drilled at the rate of 15 lbs seed per acre. Growth will be slow during the winter and faster as temperatures warm in early spring. Plants will be 3 to 4 ft tall by May and will start flowering. Flowering will continue into mid June. Seed will be mature when stems begin to turn brown and the seed are hard (early to Mid July). When seed are mature, plants can be mowed and residue lightly disked to ensure fall reseeding.

Sweetclover is best adapted to well-drained neutral or alkaline pH soils. Acid soils must be limed to pH 6.0 or higher for best results. Soils that are waterlogged through the winter and spring are not a good choice for sweetclover.

For more information on Silver River sweetclover contact Dr. Gerald Smith, Texas A&M AgriLife Research. <u>g-smith@tamu.edu</u>; 903 834-6191.