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Overton R18 Rose Clover

Rose clover (*Trifolium hirtum* All.) is a cool-season annual legume with good reseeding characteristics and tolerance to a wide range of soil pH conditions. 'Kondinin' and 'Hykon' are early maturing rose clover cultivars that generally flower in late March in the southeastern U.S. The early maturity of Kondinin and Hykon does not allow these cultivars to utilize the full growing season in which annual clovers are usually productive. Kondinin and Hykon can be productive in January and February under mild winter conditions but often winter kill at Dallas, TX and can be severely damaged by cold temperatures at Overton, TX. A rose clover cultivar with improved cold tolerance and late maturity was needed.

In 1983 a rose clover improvement program was initiated by the Texas Agricultural Experiment Station at Overton, TX. Single plant selections were made from spaced planted, rose clover plant introduction lines. Selections were made based on cold tolerance, leaf percent, height, profuse tillering, and late maturity. Ten elite breeding lines were identified and evaluated for forage production at multiple locations in Texas each year from 1985 to 1989. 'Overton R18' rose clover was shown to have a longer, later, and more productive seasonal distribution of growth than Kondinin or Hykon rose clover. Overton R18 was slightly less productive than Kondinin or Hykon at the early season harvests, but often produced twice as much dry forage as these cultivars at the mid and late season harvests. Total season forage production of Overton R18 rose clover averaged 65 percent more than Kondinin over 14 location-year environments. Overton R18 rose clover was released as a public cultivar by the Texas Agricultural Experiment Station in 1991, in cooperation with the Soil Conservation Service. Foundation seed of Overton R18 was first offered to seed producers in Sept. 1991.

Overton R18 rose clover is well adapted to defoliation by grazing animals. It develops many tillers and will flower under very heavy grazing pressure. Removal of animals from

the pasture or reduction of stocking rate is recommended at full bloom for high seed production and subsequent reliable reseeding. Forage quality of Overton R18 is high, with protein consistently above 20% from plots harvested three times in each of three years at Overton, TX. The average daily gain of steers grazing Overton R18 rose clover in 1989 was 3.5 lbs/day compared to 3.2 and 3.3 lbs/day for crimson (T. incarnatum L.) and arrowleaf (T. vesiculosum Savi.) clover.

Overton R18 rose clover is a widely adapted, reseeding, winter annual forage legume. On sandy, acid soils this cultivar responds to lime application but has been productive on east Texas sites with pH as low as 5.5. Crimson, arrowleaf, and subterranean (T. subterraneum L.) clover are unadapted to alkaline soils due to susceptibility to iron deficiency chlorosis, but Overton R18 rose clover is highly productive on well-drained soils up to pH 8.0. This new rose clover will tolerate a wide soil pH range but is completely unadapted to wet, poorly drained sites.

For additional information regarding Overton R18 rose clover contact Dr. Ray Smith, Texas AgriLife Research, P.O. Box 200, Overton TX 75684, 903 834-6191. Foundation seed of Overton R18 rose clover can be obtained through the Texas Foundation Seed Service, Vernon, TX, 817 552-6226. Overton R18 rose clover seed is available from dealersshown below.

East Texas Seed Co.
Tyler, TX
903 597-6637

Turner Seed Co.
211 CR151
Breckenridge, TX 76424
800 722-861