

# **FIELD DAY REPORT - 1992**

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## FORAGE LEGUME PRODUCTION AT OVERTON - MULTI-YEAR AVERAGES

C. L. Gilbert, G. R. Smith, and I. J. Pemberton

**Background.** The distribution of forage yield over time is dependent on forage species, cultivar, environmental conditions, utilization frequency (how often forage is removed), and utilization intensity (how much forage is removed at one time). Variety evaluations were conducted at Overton, Texas for four to six years on annual and perennial forage legumes. Plots were overseeded in October of each year on bermudagrass sods. Initial harvests were taken in mid-March each year with subsequent regrowth harvests every three or four weeks. Plots were harvested to a stubble height of 2.25 inches.

**Research Findings.** Average seasonal production for 15 forage legumes is shown in Figure 1. Hairy vetch and crimson clover produced more forage in March and early April than the other legumes evaluated in these studies. Hairy vetch and crimson clover produced 60% of their total forage yield by the early April harvest. In contrast, 60% of arrowleaf clover forage production was concentrated in the May harvest. Arrowleaf clover is generally 4 to 5 weeks later in maturity than crimson clover at Overton.

Overton R18 rose clover is three weeks later in maturity than Dixie crimson clover. Forage yield distribution of this new rose clover variety falls between crimson and arrowleaf clover with 50% of total forage yield found in the May harvest. Kondinin rose clover was included in these trials as a rose clover check variety. Kondinin flowers 3 to 4 weeks earlier than crimson clover and has low forage yields as a result of both early maturity and low cold tolerance.

Bigbee berseem gave acceptable yields in some years but is not adapted to sandy, acid, upland soils. Berseem clover is best adapted to neutral, clay loam soils with good moisture availability.

Seventy-five percent of Common ball clover's forage yield was in the May harvest. The forage yield distribution of ball clover is more like white clover than the other annual clovers.

The white and red clovers began their forage production season about one month later than the other forage legumes that were evaluated. Forage production of white and red clover ranged from April to early June with no summer survival. The white clover variety La.-S1 was not as productive as Regal or Osceola but is well adapted with good reseeding characteristics.

**Application.** All of the forage legume varieties listed in Figure 1 are adapted to East Texas with the exception of Bigbee berseem and Kondinin rose clover. The information presented here should be used to help choose a forage legume species or variety that fits specific forage production distribution requirements.

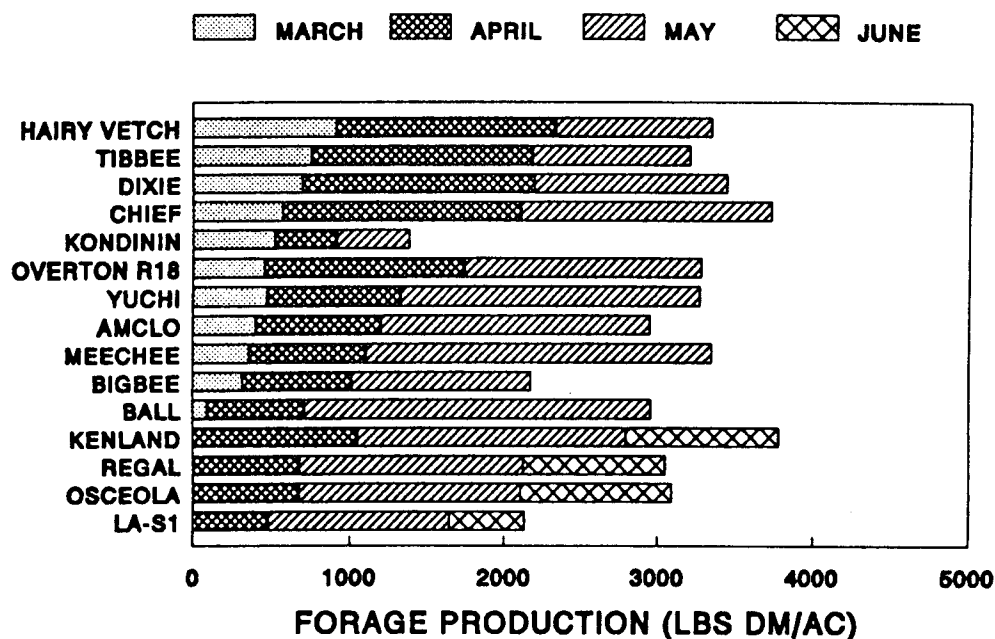


Figure 1. Forage legume production distribution at Overton, TX. March, April, May, and June production periods refer to yields measured on or around the dates March 15, April 8, May 1, and June 10. Tibbee, Dixie, and Chief are varieties of crimson clover. Kondinin and Overton R18 are varieties of rose clover. Yuchi, Meechee, and Amclo are varieties of arrowleaf clover. Bigbee is a variety of berseem clover. Ball clover is common ball clover. Kenland is a variety of red clover. Regal, Osceola, and La.-S1 are varieties of white clover.