SMALL grains have become prominent as a winter pasture and have been used for a number of years, especially in the West where a custom grazing rate is established each year (4, 6, 10, 14). Oats are used more extensively than the other grains in the Southeast to provide winter grazing. Seasonal conditions during and after grazing greatly influence vegetative growth in the fall and following spring (1, 2, 7). Subsequent grain yields are also influenced by the intensity of grazing and its duration as shown by Cutler, et al. (3) and Hubbard and Harper (8) who found that grain yields were correlated with yearly environmental conditions and severity of clipping. Reduction in height of mature plants was correlated with the date at which clipping was terminated in the spring. Clipping to March 25 in Oklahoma reduced yields of certain cereals, exceptions being oats and barley (5, 9, 13), but Stansel, et al. (12) reported that in Texas oat yields were increased by grazing to March 15. Moderate grazing in the Southern Wheat Belt did not reduce grain yields when conditions were favorable for rank growth (6, 11). Washko (15) stated that grazing small grains with sheep during the fall and spring reduced plant height. Grazing also delayed ripening from 4 to 8 days and reduced grain yields 23 to 47%.

It has been observed that in the Southeast oats planted at the recommended dates in the fall will not provide grazing until the following spring. The purpose of this study was to determine the approximate time of planting in the fall at which early and late maturing varieties of oats would produce a maximum of forage, and also to ascertain when clipping (to simulate grazing) should be terminated in the winter or spring so that a satisfactory yield of grain could be harvested.

MATERIALS AND METHODS

Arlington and Victor (early oat variety) were drilled in mid-August, October, 1946–1948. Planting dates were superimposed as sub-plots within the varieties. Clipping treatments were superimposed as (1) not clipped, (2) clipped in November, March 1, and March 20, and (3) clipped in November, March 1, March 20, and April 10. Sub-plots within varieties were 6 X 25 feet. Whole plots were replicated four times.