

ONA REPORTS

published in

THE FLORIDA CATTLEMAN AND LIVESTOCK JOURNAL

November-1988

Winter Annuals in South Florida Can Be a Risky Feed Supply

By R.S. Kalmbacher

University of Florida, Range Cattle REC



For questions or comments regarding this publication contact [R.S. Kalmbacher](mailto:R.S.Kalmbacher)

Winter annual grasses like oats, rye and ryegrass are over-seeded in dormant perennial grasses in the Southeast to provide high quality winter grazing. This practice is common on bermudagrass and is successful because freezes turn-off growth early in the fall and keeps bermudagrass dormant until spring, while cold fronts provide rainfall.

Conditions are different in Florida, especially south Florida, where frost often doesn't occur until late December. Furthermore, we can't rely on winter rain, which makes sod seeding winter annual grasses a risky practice. Our main summer grass, bahiagrass, doesn't give up easily in the fall either, and it competes with over seeded grasses for light, nutrients and water.

The yields of winter annual grasses were determined in studies at the Southwest Research Center at Immokalee and from seedings on ranches in Hardee, Manatee, Highlands and Palm Beach Counties. Oats, rye and ryegrass were seeded in mid November at Immokalee in bahiagrass with either a drill or by disking and broadcasting seed.

Bahiagrass was either treated with dalapon, available at that time for smutgrass control, or burned before seeding. These two methods of bahiagrass control were compared with untreated four to six inch tall bahiagrass. The experiments were irrigated and fertilized.

Regardless of bahiagrass treatment, winter annual grass yield was always poor. Method of seeding had little influence on annual grass dry matter yield. Grasses seeded by drilling averaged 1800 pounds per acre and those seeded by disking and broadcasting averaged 1500 pounds per acre. Method of bahiagrass control also had little effect. The two-year average yield for the three winter annuals was 1800 pounds per acre in the dalapon treated bahiagrass. 1600 pounds per acre in the burned bahiagrass and 1400 pounds per acre in the untreated bahiagrass.

The data below shows two-year average dry matter yields pounds per acre of each of the grasses averaged over bahiagrass treatment and methods of seeding, and they are compared with five-year averages for the same variety of oats (Coker 227), rye (Pennington Wintergrazer 70) and ryegrass (GuIf), seeded in a clean-tilled soil, variety-test at Immokalee. All the grasses seeded in bahiagrass performed below their yield potential, especially ryegrass which yielded only about one-third of that seeded and grown in a prepared seedbed.

For the above reasons we recommend that winter annual grasses be seeded in a prepared seedbed, and in south Florida ryegrass is the recommended forage. Use seedbed preparation for ryegrass as an opportunity to get ready for the following year's perennial grass establishment. Using winter annuals as a pasture renovation tool has been practiced since the mid 1960's at the Ona Research Center. We use a turning plow, and turn under the old sod, seed and pack the seedbed in the same day. This results in little moisture loss and even under dry conditions a stand is obtained. After the ryegrass is gone in the spring, the pasture is disked occasionally during the dry season to eliminate weeds. When rains start in June or July we have the excellent seedbed necessary to establish perennial grass pastures.

Forage	Yield When Seeded in Bahia	Yield When Clean-tilled
Oats	2230	4200
Rye	1810	4000
Ryegrass	1870	5400