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AIRPLANE-SEEDED WHEAT - AID TO DOUBLE CROPPING

John Watts and S. H. Phillips

Airplane-seeding of wheat has been increasing since its start in 1965 in Fulton County, Kentucky. Over 20,000 acres were seeded in the fall of 1968, with the acreage concentrated in the Purchase and Bowling Green areas.

Farmers report these advantages for aerial seedings: (1) early establishment of small grain; (2) similar seeding cost as compared to drilling; (3) labor use in normal seeding operations diverted to other farm operations.

The early establishment of the small grain reduces erosion, provides additional forage for livestock, and improves yields (when compared to late seedings). Early planting of small grain in the fall produces normal harvesting dates in the spring, which allows double-cropping or planting soybeans or corn near normal time for higher yields.

A study of aerial-seeded wheat was made in 1967 in cooperation with Murray State University. Ten fields each of aerial-seeded wheat and drilled wheat in disked seedbeds were randomly selected with data checked on plant population, number of wheat heads (tillering), head weight, and yield under each seeding method. In addition, ten farmers that had seeded wheat by both methods agreed to determine per-acre yields of each method on their farm. All aerial-seeded wheat was surface applied without additional seedbed preparation or seed coverage.

The data indicated that the aerial-seeded wheat had a plant population of 10.8 wheat seedlings per square foot and produced 36 heads, while the drilled plots averaged 13.3 seedlings per square foot and produced 33 heads. The heads of the aerial-seeded wheat weighed .4 gram more than the heads of drilled wheat. The aerial-seeded wheat yielded slightly more than the drill-seeded wheat, although the differences in yield were not significant. (Several of the drill-seeded fields were planted in November which could have reduced the yield on these fields.)

The conclusions determined from this study were: 1. no significant difference in yield existed between aerial- and drill-seeded wheat; 2. aerial-seeded wheat gets off to an early start when seeded in standing crops, and will yield more than late November drill-seeded wheat when corn or soybean harvesting delays wheat planting; 3. aerial-seeding provides an early vegetative cover for winter pastures and for erosion control; 4. aerial seeding may save the farmer valuable time at the peak corn and soybean harvest season.