Effects of Spring and Fall Plantings on Seed Production of Several Grass Species

R. W. Van Keuren and C. L. Canode

Essentially no research information is available on the effects of time of planting on the seed production of cool-season grasses. Early-spring and fall planting of all species of cool-season grasses have been recommended in irrigated areas. The loss of cash income during the establishment of spring plantings has delayed development of the grass seed industry in the highly productive irrigated areas of the Northwest. The use of a companion crop to supply a cash income during the establishment year has often resulted in stand failure of the grass. Fall seeding following the removal of a cash crop has given good seed crops the next year for some species but has been unsuccessful for others.

Research was undertaken to study the effect of spring and fall planting on seed yields of several cool-season grasses. Related components of seed yield (number of culms produced, seed yield per 100 culms, and average weight of 100 seeds) were also studied.

Materials and Methods

Eleven varieties and strains, representing 8 species of cool-season grasses, were studied:
1. crested wheatgrass, Agropyron desertorum (Schult.) Fisch. ex Link, 'Nordan'
2. Siberian wheatgrass, A. tibicinum (Willd.) Beauv., strain P-27
3. intermediate wheatgrass, A. intermedium (Host) Beauv., 'Greenar'
4. pubescent wheatgrass, A. trichophorum (Link) Richt., 'Topar'
5. tall fescue, Festuca arundinacea Schreb., 'Alta'
6. timothy, Phleum pratense L., 'Climax'
7. smooth bromegrass, Bromus inermis Leyss., 'Manchar'
8. smooth bromegrass, B. inermis Leyss., 'Lincoln'
9. orchardgrass, Dactylis glomerata L., 'Potomac'
10. orchardgrass, D. glomerata L., 'S-143'
11. orchardgrass, D. glomerata L., 'Latar'

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