

twenty-five races by looking among the smaller farms in less progressive areas. The races of corn now being grown have apparently changed relatively little except in those areas in which the National Corn Commission has established corn seed production (hybrids and/or varieties). With the rapidly expanding net-work of good roads, the growth of the production program of the National Corn Commission, the growth of the Extensive Service plus the growing interest on the part of farmers themselves, a change in the corn race distribution will probably take place at a greatly accelerated pace. This change is already evident in areas where crop improvement programs have been initiated.

R. D. Osler
E. C. Johnson

2. Resistance to ear and tassel smut in Mexico.

Data from 1958 corn plantings in the Bajío region of west central Mexico show distinct differences of reaction among several hybrids and varieties of corn to the ear and tassel smut incited by the organism Sphacelotheca reiliana (Kuhn) Clinton.

Plantings of 12 varieties were made at 4 different planting dates. Highly significant differences were found among varieties and among dates of planting in reaction to the fungus. The most susceptible hybrids were those that included lines introduced from tropical corns. Of plantings made March 15, March 31, April 15, and May 1, the highest percentages of infection were obtained in the May 1 planting.

Commercial corn plantings in the area ranged from no infection to individual fields with 40% or more of the plants infected. Literature reports of the disease indicate it to be of minor importance, but experience in Mexico suggests the desirability of incorporating genetic resistance to the disease in corns for the Bajío region of the country.

E. C. Johnson
R. D. Osler

SOUTH DAKOTA STATE COLLEGE
Brookings, South Dakota
Departments of Plant Pathology and Agronomy

1. Relation of root rot and root type on yield and maturity of maize.

Inbred lines derived from two ears of Fulton's yellow dent have been shown to differ in the expression of root rot. The evaluation of the importance of root rot and other morphological characteristics was estimated from a series of multiple measurements involving the roots of corn