

## III. REPORT ON MAIZE COOPERATIVE

Seed requests to the Maize Cooperative for 1967 numbered 153. This is one more request than was received in 1966. The requests were from a wide geographical area with 71 per cent coming from 25 states in the U.S. and 29 per cent from 16 foreign countries. This is a 13 per cent increase in foreign requests over 1966. A further breakdown of requests showed that 75 per cent of the requests were from geneticists, 16 per cent from plant breeders and 9 per cent for educational purposes (class ratios, etc.).

During the summer of 1967 seed increases were made on A-B translocation stocks, virescent seedling traits and certain chromosome tester stocks in need of increase. In addition, increases were made of certain selected chromosome tester stocks needing upgrading. Several single gene traits, e.g.,  $su_1^{am}$ ,  $j_2$ , etc., which have been difficult to classify or are very poorly expressed in their present genetic background, were grown to isolate better expressions of the trait. Increases were also made on primary trisomics 3, 5, 8, 10 and in addition trisomics 2 and 4, received from Dr. Doyle, were increased. Work is in progress to isolate the other trisomic stocks of the series.

About 50, permanently designated, reciprocal translocation stocks of Dr. E. G. Anderson were increased in 1967. This completes the assembling of the material at one location that was started in 1960. At present, the collection consists of 863 different reciprocal translocations of the 1,003 listed in Dr. Longley's publication ARS34-16. The material is being ordered and a listing should be available in March.

Work is also continuing on chromosome location of unplaced genes in the collection. This past summer 108 different mutants, which came from Dr. E. G. Anderson's collection and had been located to chromosome over the past several years, were grown. This work will continue with emphasis on more specific location of those traits which will make good seedling or mature plant chromosome markers.

The attached catalogue of stocks represents a listing of currently available genetic stocks. This list is slightly revised from that published in 1967. A more complete list of reciprocal translocation stocks is published in the 1966 News Letter, Vol. 40 (P. 186-190).

Requests for seed and correspondence relative to the stock program should be addressed to Dr. R. J. Lambert, S-116 Turner Hall, Department of Agronomy, University of Illinois, Urbana, Illinois 61801.

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