

## IV. REPORT ON MAIZE COOPERATIVE

A total of 168 seed requests were supplied during 1968. This was the largest number of requests for a one year period. A total of 122 (72 percent) of the requests were from 26 states in the U.S. and 46 (28 percent) requests were from 22 foreign countries. In addition, 73 percent of the requests were from Geneticists, 17 percent from Plant Breeders and 10 percent for educational purposes. A total of 88 requests for opaque-2 and floury-2 have been received during the three year period 1965-1968; 65 of the requests were from the U.S. and 23 from foreign countries.

During the summer of 1968 seed increases were made on certain maize genetic testers for chromosomes 1, 2, 3, 4, 6, and 9. In addition, about 128 translocation stocks were grown to increase seed and obtain desirable genotypes. Also 22 inversion stocks were grown for seed increase and confirmation of pedigrees. Seed increases were also obtained on tetraploid marker stocks, T and S sterile cytoplasm along with certain Rf<sub>1</sub> and Rf<sub>2</sub> restorer combinations.

A total of about 800 allele tests were made on endosperm mutants and seedling traits in order to test certain cultures that have accumulated over the years. The endosperm and seedling traits found not allelic to the standard series will be crossed to A-B and waxy translocation series for gene location studies.

Work has been finished on assembling the translocation stocks from Dr. E. G. Anderson's collection. A total of 865 reciprocal translocations are now catalogued and in the collection, 734 of these have been sent to Fort Collins, Colorado for safe keeping. It is planned to send the remainder to Fort Collins in the near future. The attached catalogue of reciprocal translocation stocks summarizes this collection and includes the stocks that are available.

A complete list of chromosome marker stocks currently available can be found in the 1968 News Letter Vol. 42 (p. 186-194).

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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