## 2. Genetical studies.

2-1) <u>Linkage tests</u>. Since our old stocks have unfortunately been lost, owing to some unforeseen circumstances, the material is being reorganized, both from the remaining material and from new introductions. Again the same difficulties, as before, were encountered. Many "good" genes such as golden, purple plant, virescent, etc., appeared so highly variable phenotypically, thus being of little use for linkage tests. Other new strains showed a sufficient genetic adaptability to the climate, improving after selfing or sibbing, from year to year, while others lack this ability and must be immediately backcrossed to Brazilian selected stocks. A very good sample of translocations was obtained from Dr. Brink and is being tested for usefulness here, both with and without crossing to Brazilian stock.

## J. T. A. Gurgel