UNITED NATIONS SPECIAL FUND (UNESCO) PROJECT Mindanao Institute of Technology Kabacan, Cotabato, Philippines

1. MIT--UNESCO Corn Program.

The strengthening of agricultural training at the Mindanao Institute of Technology is the overall program of the plan of operations for this UNSF/UNESCO Project. In the area of agronomy, of seed production and distribution and of corn improvement, seed and field corn production for food, feed and fodder is one of the objectives. Since September 1966, crop oriented production goals and the ways and means to accomplish them were drawn. Vigorous direct action and high pay-off corn improvement for Mindanao island is vital to the Filipinos. This new virgin land of promise and hope, so suitable for the corn crop, will offer a great opportunity in socioeconomic growth of new settlers from Luzon and Visayas.

B. S. Sidhu C. Marasigan

2. Corn improvement studies.

Pyramiding the corn yields through controlled biological plant development is a complex undertaking because many varietal-soil plant-environment-management interactions are involved in successful crop production. This is especially true for the humid tropics where sufficient adaptive agronomic research is yet lacking.

Several local, exotic and intercrossed composites and varietal collections are being test screened. Some new experimental synthetics of white and yellow flinty types are under observation. A new MIT variety satisfactorily resistant to downy mildew disease has been released. The use of opaque-2, brachytic and prolific corn materials is being made in the breeding program.

B. S. Sidhu R. Gloria

3. Genetic studies on resistance to downy mildew (Sclerospora sps.).

This is a very serious disease not only in the Philippines but also in the neighboring countries of Indonesia, Malaysia and Nationalist Chinese Republic.

A 43 entry downy mildew screening regional trial nursery under the International Corn Program has been planted and resistant lines will be used in the breeding program. Simultaneously, on the basis of preliminary investigations regarding the resistance to the disease among native varieties such as Mimis and Tinigib, a study is underway on the investigation of inheritance of resistance to the disease organism.

R. Gloria B. S. Sidhu