

1. Agricultural Program.

The varietal improvement of maize and wheat were the two first projects undertaken by the cooperative agricultural research program of the Colombian Ministry of Agriculture and The Rockefeller Foundation. This program began in May, 1950.

A basic phase of the corn improvement program has been the systematic collection of the native varieties. 1193 samples were collected in Colombia prior to January 1, 1953. Approximately 40% of the corn growing areas of the country are still to be collected. Two trained field collectors will continue until the job is completed.

The collections are being evaluated from the standpoint of desirable agronomic characteristics for use in a breeding program. They are also being grouped into races on the basis of their natural relationships. At least 15 races have been identified so far. Several more will undoubtedly be identified as more detailed studies are made.

Some of the races are of interest for their desirable agronomic characteristics, and others from the standpoint of their primitiveness. One race is extremely interesting in view of the climatic conditions and cultural practices to which it is adapted. This is a small eared popcorn to which has been given the name "Chococito" because it is found distributed along the Pacific Coastal Plain in the Department (State) of Choco. (Also, it is often called "Maiz Indio" by the natives). The annual average rainfall in this region is among the highest in the world, varying from 300 to over 400 inches per year. The very high temperature and relative humidity are characteristic of a low elevation tropical rain forest region. Perhaps more interesting than "Chococito's" adaptation to adverse climatic conditions is the fact that this race thrives with probably the minimum cultural care from man of any corn on record. The seeds are planted broadcast in usually a small plot of land alongside a river which has previously been cleared from rain forest. They are not covered by soil but only by the leaves and plant residue from the shrubby growth that is felled after the seeds are scattered broadcast on the surface of the ground. Usually the corn is not cultivated or weeded even once from planting to harvest.

The National Research Council in cooperation with the Rockefeller Foundation initiated a program in 1951 to collect and preserve the indigenous corns of the Americas. Colombia was designated as the center responsible for collecting and preserving the corns of the Andean region of South America. This region includes most of Venezuela and Bolivia and all of Colombia, Ecuador, Peru, and Chile. The number of collections from each country to date is as follows; Venezuela 256, Colombia 1139, Ecuador 218, Peru 275. Collecting in Chile and Bolivia has not yet been started. It is planned to continue the collecting work, which is being carried on collaboratively by the agricultural research technicians in the respective countries and the center in Colombia, until the entire Andean region is thoroughly sampled. Seed of each collection will be kept viable at the corn germplasm bank in Medellin, Colombia and will be made available on request to all research workers in corn genetics and corn improvement.