

Dear Mulchers,

We are now tabulating the results of our study of the extent of mucuna use in Mesoamerica (Honduras, Guatemala, and Mexico), being done by Ami Kadar. Some of the information is pretty much what we expected, but some of it is quite interesting.

In general, we have found that the system is alive and well, in all three countries. In Honduras, it is losing ground to oil palms and cattle, though thousands of farmers still use it. Interestingly enough, it is still apparently spreading south into the Department of Gracias.

In Guatemala, it is apparently holding its own in the Polochic Valley, but spreading fairly rapidly through the Peten. And in Mexico, it is spreading in a few isolated areas, in Tabasco and Veracruz States. Actually, we were surprised to find a few farmers using it clear up in the northern reaches of Veracruz State.

The most interesting result of the study is that there are a good eight distinct systems in which mucuna is associated with maize, and these systems do seem to vary according to climatic conditions, to some extent. Of course, it was a little difficult to define exactly how we would count the systems (we could have had about 20 systems if we'd been

more focused on the differences in planting dates, for instance). What we did to differentiate systems was to say that, for one system to be considered different from another system, either the maize or the mucuna had to be planted in a different season altogether. For this purpose, we counted three seasons--the early "primera" season, from May to August; the late "postrera" season, from September to November; and the "drier" season, from December to April. Here is the run-down of systems (if any of you can think of some more inspiring names for some of these, let us know):

1. The "Drier Season" System. Here the maize and mucuna are both planted in December-January, and the mucuna grows until the following December. This is the dominant system on the North Coast of Honduras, the Polochic Valley, and much of Caribbean Mexico.
2. The "Chahuitera" System. In this case, the planting dates are the same, but the purpose and location of the system is very different. In drier areas (eg the western part of the Tehuantepec Peninsula), this system is used alongside rivers. Maize is planted using the receding moisture, and the mucuna is largely planted with the purpose of a green mulch--to maintain as much as possible the moisture in the soil.
3. The "Double Maize" System (this name CRIES for a better moniker!). In this case, maize

is planted in both December and May, together with mucuna. Interestingly enough, this system exists in small pockets in all three countries, in the highest reaches of the mountains along the Honduran coast, near Malpaso in Chiapas, and in Chixoy and parts of the Peten in Guatemala. This System should be of particular interest to development institutions, because in some areas (notably the North Coast of Honduras), the mucuna system is losing ground because it is not "intensive" enough--presumably cannot produce two harvests of maize in the same year. The presence of this system in one place after another would seem to solve that limitation.

4. The "First Season" System. This system consists simply of planting both the maize and mucuna in May-June, when the rains start.

5. The The "Traditional Green Manure" System. Here, just as green manures have been managed in the temperate climates traditionally, the mucuna is planted in the first season, then cut down in time for the maize planting in the second season (sometimes as late as November).

6. The "Second Season" System. Both the maize and mucuna are planted in October. Interestingly enough, farmers who practice this system usually practice the First Season System on another piece of land. That is, they have one maize/mucuna system that

produces maize in October, and another, on another nearby field, that produces maize in about January. That way, they never have to store maize more than about seven months.

7. The "Omoa" System. Apparently only used around Omoa in northern Honduras, this system consists of planting maize and mucuna in May-June, and then cutting everything down, so a second crop of maize is injection-planted through the dead mulch in September-October.

8. The "Improved Fallow System". Used both in Cerro San Gil, Guatemala, and in Mexico, this system is basically an improved fallow or rotational system: the mucuna is planted in May, allowed to grow one to two years, and then the maize is planted the following May-June, for a year or two.

(In the last memo, I meant the TOWN of Gracias, in the Lempira Department, rather than the Department of Gracias, which doesn't exist. Although the capital of the Department of Gracias A Dios, to confuse things totally, is called Puerto Lempira.)

**A final version (about 40 pages) of the study will be available within about a month.
Rolond Bunch**