

DISCUSSIONS

Dr. Richardson :

I have two questions. First, do you refer to *Dioscorea composita* as an individual specie or a combination of a number of species of the wild material ?

Dr. Sarukhan :

It is one specie.

Dr. Richardson :

The second question. Did I understand you to say that you felt that the environmental ecological knowledge was sufficient at this stage to put this particular specie under cultivation as a crop ?

Dr. Sarukhan :

No. My feeling is that ecological knowledge of the requirement of a specie is a very good help to take the specie to domestication level. It's by no means enough to take the specie to a domesticated level but it helps very much to understand the requirements of the specie, though a knowledge problem of these relationships will give you a better picture of the likely problems in domestication.

Dr. Shrum :

If I understand you correctly, there are tips left in the ground after harvesting operations by wild collectors. Do you feel that these tips will recover, produce plants and continue to supply a root source in Mexico ? And I would like to ask you what the price of the root is in Mexico for the dry root at the present time.

Dr. Sarukhan :

The residues of the tuber pieces in the ground is not a reliable way of ensuring regeneration. Of course we must remember that regeneration by seeds is also quite effective.

The price is variable because it depends very much on the season of harvesting. It is about 300 pesos per ton fresh weight.

Dr. Martin :

I would like to ask if the experience you gained over the years working on *Dioscorea composita* leads you to believe that there are strong differences in the sapogenin content and the tuber size from area to area. Are these differences likely to be genetic rather than environmental ?

Dr. Sarukhan :

We have found strong differences in the sapogenin content. One of the reasons for this difference is the water content in the soil. We have thought about this problem of ecological influence or something more related to the genetic problems of the species. We have not finished studying biosystematics of *Dioscorea composita*, but we suspect that there is quite a strong genetic variation in the species. We think that this genetic variation, together with the ecological variation, adds to the observed variability.