



*A work-weary farmer takes a proud moment to pose by his corn crib west of Toluca, Mexico on the road to Morelia. A sample of ears purchased from this man for 20 pesos (\$1 U.S.) revealed tremendous diversity in ear shape, row number, kernel color and shape. Photo by Hugh H. Iltis.*

### **Preservation of Genetic Diversity**

As our industrial culture continues to evolve and as our human population continues to grow, we of necessity must pick and choose among all that has gone before to decide just which aspects are to be brought forward into the future and thus preserved.

Our living evolving earth is fragile and many forms of life are now being lost. If we do not make a conscious effort to preserve the genetic diversity of life, we will lose potentially valuable resources. Our children's children will be bound by our decisions whether right or wrong.

We are rapidly changing existing ecosystems into monocultures of corn, wheat, rice, potatoes and other crops. At the same time we are eliminating much of the diversity in these field crops by concentrating on growing a few standard varieties within each crop.

We need to better appreciate the value of genetic diversity. We need to preserve diversity. Simply

stated, diversity and diversification decrease the odds of catastrophe or failure and increase odds of success.

Living systems must be fit for the present but flexible for the future. For our culture to be flexible we must attempt to preserve life on earth in its diversity, for who knows just which organism out of every hundred or thousand will prove to be of value to us in the future?

The present issue of *Desert Plants* carries articles on tomatoes and corn which attempt to demonstrate how genetic diversity from wild species may be used to advantage in breeding desirable qualities into crop plants. The need to preserve genetic diversity occurs at all levels. Wild species can be preserved by protecting critical habitat. Cultivated varieties have been preserved by various ethnic groups. With the incorporation of such ethnic groups into the amalgam of generalized industrial culture the survival of diversity in cultivated plants is uncertain.