

Tassels. Well preserved tassel branches and entire tassels show the typical arrangement of paired spikelets, one member sessile and the other pedicelled. The spikelets are smaller than those of modern maize. Tassel diagrams of two almost intact tassels are similar to those of the Peruvian race, Confite Morocho.

Anthers. Several tassel branches contained well preserved anthers filled with pollen.

Pollen. The prehistoric pollen when mounted in lactic acid and iodine assumes the shape of modern pollen but is somewhat smaller in size than the pollen of most modern varieties. Pollen from four different tassels measured 78.1, 80.6, 82.5, and 86.6 microns respectively. This is well within the range of pollen size of some of the modern races regarded as ancient such as Chapalote and Nal-Tel.

Conclusions. The majority of the specimens from this site could be assigned to the Mexican race, Chapalote, but they are also related in some respects to the Peruvian race, Confite Morocho. A few specimens differ in some characteristics from either of these races and are more closely related to the Peruvian highland popcorns. In all of its basic botanical characteristics the earliest maize from Huarmey is identical with modern maize.

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4. Prehistoric maize from Huaca Prieta, Peru.

The specimens from this site excavated some years ago by Dr. Junius Bird consist almost entirely of cobs. These are quite different from those of the Huarmey site. The majority are globular in shape having eight-kernels rows at their butts and tips and 10, 12, or 14 rows in the middle regions. Because of this change in row number most of the cobs do not show distinct rows but many exhibit a spiral arrangement of the spikelets similar to the spiral of a pine cone. Ears of this type rarely have stumps of staminate tips.

These cobs differ also from those of Huarmey and of the early prehistoric cobs from the Tehuacán caves in their cupules. The differences are best illustrated by photographs and drawings to be published soon but may be briefly described here. The cupules of the typical Huarmey maize are similar to flat saucers almost square in outline attached to a four-sided central stem. The typical cupules of the majority of Huaca Prieta specimens are structures similar in shape to the toe halves of pointed shoes inserted into an egg-shaped central stem at an angle with the toe pointing toward the tip. Since we have not encountered cobs of this type in the prehistoric corn from the caves in Mexico or southwestern United States and since they are similar to the cobs of the living races in the Peruvian highlands, especially Confite Puneño, we conclude that they have stemmed from a different wild race than the prehistoric wild maize of Mexico. However, in the Huaca Prieta collection there are a few cobs similar to the majority of those from the Huarmey site in Peru and the Tehuacán caves in Mexico as well as some intermediates which may have resulted from hybridization of these two distinct types.

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