Something Old, Something New

Farm Practices Near Tehuacán, Mexico

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Climatologically, the Tehuacán area of the State of Puebla, Mexico, is among the oldest parts of Mexico. Lying just inside the Sierra Madre Oriental or Sierra de Zongolica which separates the States of Puebla and Vera Cruz, it has probably had a semi-arid climate for many thousands of years. This assumption is supported by the large number of xerophytes endemic to the Tehuacán region.

Meteorological records for Tehuacán show that the average annual precipitation is 478 mm., while Cuicatlán, Oaxaca, at the southern end of the area has an annual average precipitation of only 301 mm. The Cuicatlán area normally has no measurable rainfall in January and February; the rainy season is from June to September. For eight months, rainfall is very light.

Lack of available moisture during parts of the year is reflected in the natural vegetation of the Tehuacán area. The normal land cover below the level of about 1,800 m. elevation is thorn-scrub-cactus forest (Fig. 1). On the mountain slopes above 1,800 m., more water is available, and the change to oak-pine forest is sometimes very abrupt (Fig. 2). At the very top of the mountain ridges rising to about 3,000 m., a montane rainforest develops. Intensive grazing for 400 years by sheep and goats introduced by the Spaniards has probably altered the species composition of the native flora in the valley.

The Tehuacán Valley falls in a series of giant steps from the northwest to the southeast. Near Tehuacán, the land is nearly level across the valley floor; to the west rise the low, white, limestone cliffs of La Mesa; to the east can be seen the high, red cliffs of Cerro Colorado. This end of the area has been cut and drained by the Río Salado. Southeastward, hills appear on the valley floor, and the southern end of the area drained by the Río Grande is little wider than the river valley itself. At the northern end, the valley floor lies at somewhat less than 1,700 m. elevation. Where the Ríos Salado and Grande join and flow abruptly eastward through the mountains as the Río Santo Domingo, the valley floor lies at about 600 m. elevation (Fig. 3).

The inhabitants of the Tehuacán region are mainly mestizos and Indians. Although the colonial period in Mexico has left several large haciendas, the pattern of Indian living remains probably largely unchanged. Many of the haciendas are now gradually deteriorating, since the land-ownership pattern has altered. Tehuacán, just south of the Mexico-Vera Cruz highway, is the commercial and political center of the valley.

Agriculture in the Tehuacán Area

Patterns of cultivation are an expression of the amount of effort needed to produce enough food for subsistence or a surplus intended for commerce. Only rarely has a people become sufficiently opulent to be able to afford extensive plantings for esthetic pleasure alone. In the Tehuacán valley, agriculture developed first on a subsistence level and then progressed to the production of surplus for commerce.

Because of the differences in the available rainfall, the patterns of cultivation in the vicinity can be roughly divided into agriculture practiced above 1,800 m. elevation and that practiced below the level of the oak-pine forest. In this valley-farm category, the main concern of this paper, agriculture can be subdivided into dry farming, barranca farming and irrigation farming.
Fig. 1. Thorn-scrub-cactus forest near Coxcatlán.

Fig. 2. Oak-pine forest near Apala; the volcano, Cítlaltepetl or Orizaba, in the background.