

oaks (*Quercus*), and plants such as *Brahea dulcis*, *Dioon edule*, *Hicoria pecan*, *Cercis canadensis*, *Litsea glaucescens*, *Ungandia speciosa*, *Juniperus flaccida*, *Pistacia mexicana*, and *Arbutus xalapensis*.

RESULTS

Species Richness

A total of 413 bats, belonging to 4 families, 19 genera and 29 species were collected in a total of 1,064 m of mist net. Table 1 lists the species following Hall (1981) and Wilson and Reeder (1993). A detailed account for every species was presented elsewhere (León, 1986).

Several species were found in only one locality, including *Pteronotus dayvii* in Ahuacatlán, *Lasiurus ega* and *Molossus rufus* in Jalpan, *Anoura geoffroyi* and *Plecotus mexicanus* in Pinal de Amoles, *Myotis thysanodes* in Camargo and *Antrozous pallidus*, *Macrotus waterhousii* and *Nyctinomops macrotis* in Peña Miller. Other bat species such as *Euderma maculatum* in Peña Miller, *Pteronotus personatus* in Camargo, *Myotis velifer* in Ahuacatlán, and *Diphylla ecaudata* in Santa Inés, were not included in this analysis because they were not caught the year considered in this study (León, 1986).

No significant differences were found for the number of species trapped in each side of the mountain ($X^2 = 0.43$, $P > 0.1$). Twenty one species were found in the eastern (humid) slope, whereas 18 were caught in the western (dry) slope; 13 species were common to both sides of the mountain range.

Species richness decreased with increasing altitude ($F = 11.672$, $P < 0.02$, $r = -0.863$); Jalpan and Maguey Verde showed the highest and lowest species richness values, respectively (Fig. 1). The locality of Santa Inés, in a mid-elevation position, with an oak (*Quercus*) forest, showed unexpected low species richness.

The number of species captured per linear meter of net was not significantly correlated with altitude ($F = 0.302$, $P > 0.6$, $r = -0.264$) and the highest value was found in the dry part, Camargo, roughly doubling the lowest value found in Pinal de Amoles.

The number of species as function of time showed a larger number for the localities in the more humid slope of the mountain and a larger species richness for the warm months of the dry season (Fig. 2). The months with the highest and lowest number of species for the humid slope were April and January, respectively. In contrasts, in the dry region of the transect, the highest number of species was found in May, and the lowest in February.

Density

The number of individuals captured per linear meter of mist net was negatively correlated to altitude ($P < 0.026$, $r = -0.863$) and the locality with the highest density was Ahuacatlán, whereas the minimum was located in the top of the mountain (Fig. 3). Bat density was higher in the localities found in the humid slope.