

Ethnobotany of Pre-Andean Community in the Andes of Northern Chile¹

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The perception of the surrounding environment and use of the flora by the inhabitants of Toconce, a Pre-Andean community in the Andes of northern Chile, were investigated. Six ecological units, which are given the local names of Pampa, Tolar, Medano, Pajonal, Hoyada, and Paniso, are recognized by the people of Toconce on the basis of their different dominant plants, geomorphology and microclimate. These units are in turn integrated into 3 units of landscape utilization: Cerro, Campo and Chacra. The latter is an artificial unit, corresponding to the man-made terraces located on the steep slopes of the Andean canyons. The Campo is a pastoral area, mainly for llamas. The Cerro, situated at higher elevation, has ritual as well as economic importance. This altitudinal sector is the place for the gathering of llareta, the most valuable vegetal fuel in Toconce. Seven categories of plant use are defined: forage, medicinal, food, fuel, crafts, ritual and construction. The inhabitants of Toconce have maximized the use of the plant resources in each altitudinal level. This long-lasting cultural pattern is being gradually modified due to the influence of industrial development and growth of the neighboring urban centers.

During several thousand years the inhabitants of the Andes of South America have faced the challenge of survival in a highly heterogeneous landscape. Throughout its pronounced altitudinal gradients, the Andean chain displays an enormous diversity of ecological zones (Weberbauer, 1936, 1945; Tosi, 1960; Pulgar Vidal, 1971), each one representing different possibilities for the subsistence of the Andean people. It has been suggested (Murra, 1972) that the "vertical control of ecological zones," i.e., the people's ability to exploit different altitudinal levels, constitutes the basis of the cultural patterns and economy of many ethnohistoric and contemporary Andean communities. This model of subsistence, associated directly with a vertical perception of the landscape, has been found to apply to several communities inhabiting the oriental slopes of the Peruvian Andes (Brush, 1974, and references therein). We were interested in testing the applicability of this model to a community in the Andes of northern Chile.

Most commonly, ethnobotanic studies carried out in the central Andes of South America have been limited to extensive lists of plant species, their common names and uses, with few miscellaneous notes on the perception of the landscape by their inhabitants (e.g., Yacovleff and Herrera, 1934–1935; Towle, 1961; Gunckel, 1967; Cardenas, 1969; Serracino et al., 1974). In this paper we investigate the use of the flora and its relation to the perception of the surrounding environment by

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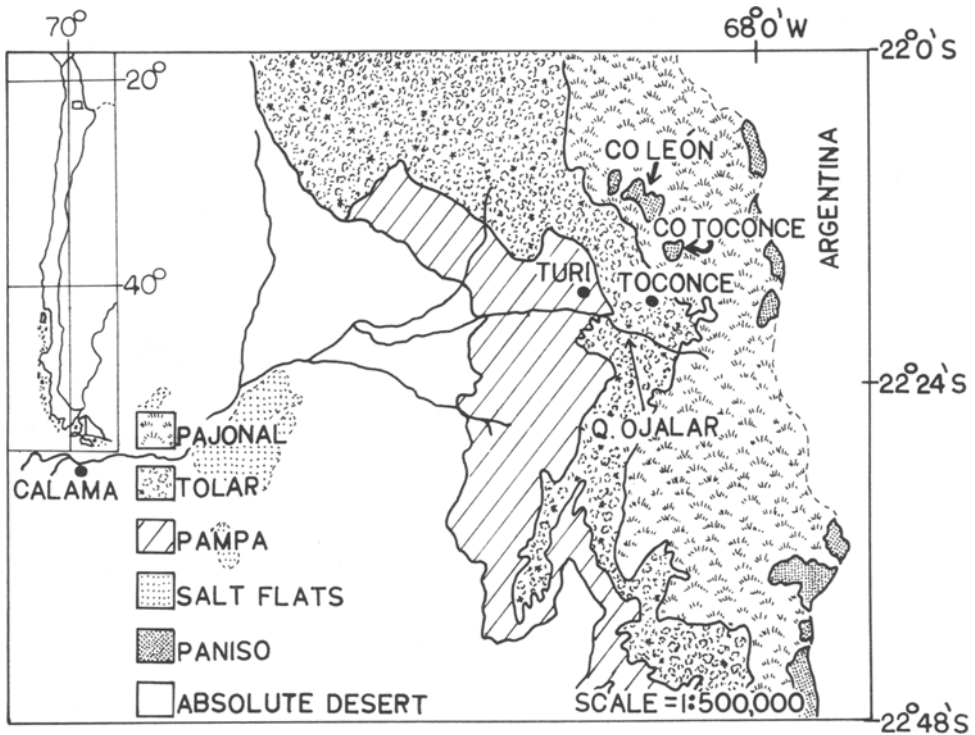


Fig. 1. Location of the study area and approximate altitudinal extension of the ecological units recognized by the people of Toconce. Hoyadas and Medanos were not included because they are habitat-types scattered at various elevations rather than altitudinal zones.

the inhabitants of Toconce, a small indigenous community in the Pre-Altiplanic sector of the Andes of northern Chile. The situation of this community, located on the occidental slope of the Andes, is somewhat different from that of the Peruvian communities previously studied (Brush, 1974), since the presence of the lowland desert in northern Chile greatly restricts the access to lower altitudinal zones. However, the value of Murra's model resides in its apparent adaptability to a wide variety of Andean scenarios (Murra, 1972; Brush, 1974). On the other hand, the members of the Toconce community have historically maintained close social and cultural connections with similar communities in the Bolivian and Argentinian sectors of the Altiplano (Castro et al., 1979), so that our results may have a broad significance with respect to the modes of subsistence and cultural patterns in the central Andes.

STUDY AREA

Human settlement and topography

Toconce is located at 3,550 m, ca 90 km east of the city of Calama in the Andes of northern Chile (Fig. 1). The village has an indigenous population of about 260 inhabitants who depend fundamentally on agricultural and pastoral activities. Major livestock animals are llamas, sheep, and goats.