

---

# DISTRIBUTION OF OAK IN THE STATE OF SONORA, MEXICO<sup>1</sup>

by Luis M. Islas<sup>2</sup>

---

The State of Sonora, situated in the northeastern part of the Mexican Republic, presents numerous and varied climates that promote floristic diversity in arid and semi-arid as well as more temperate climates. These more temperate climates, found in the mountainous regions in the Northeast, East, and South of the state, support a great diversity of oaks. These oaks are associated primarily with conifers at the highest elevations, and form a part of the natural grasslands in the North, including the counties of Magdalena de Kino, Nogales, Imuris, Cananea, Santa Cruz, Bacoachi, Nacozari, Bacerac, Bavispe, and Huchineras.

The oaks are found in 8 of the 22 vegetation types identified by SAHR-COTECOCA and published in 1986. The most important of these vegetations types, according to the presence and number of species of *Quercus*, are: deciduous oak woodland, located in the coldest part of the state, in the counties of nacori Chico, Sahuaripa, Yecora and Alamos, where 18 of the 30 species of oak are found; and the oak-pine forest, with a similar distribution and 17 species of oaks. The arbofrutescent (shrubby vegetation) mid-grassland is the vegetation type of greatest area, and 32 species of oak are found there. The oaks are found over an area of about 3,585,000 hectares, dominated by the arbofrutescent vegetation type of 1,710,000 hectares and the deciduous oak woodland with 265,000 hectares.

## Uses

At present, the oak species are little utilized, their principal uses being for the construction and maintenance of corrals, fences, and habitations by ranch owners. The potential of these species as lumber, firewood, and charcoal is not being realized. The finishing of the lumber is the primary constraint.

The acorns of all species are consumed by cattle and wildlife, and at least one edible species, *Quercus emoyi* is gathered for food and commercial markets.

## Taxonomy

*Quercus arizonica*, *Q. chihuahuensis*, *Q. emoryi*, and *Q. oblongifolia* have been identified from the forested areas of Sonora, as well as other woodland and grassland species.

<sup>1</sup>This paper was presented at the Symposium on Ecology and Management of Oak and Associated Woodlands: Perspectives in the Southwestern United States and Northern Mexico, April 27-30, 1992, Sierra Vista, AZ.\*

<sup>2</sup>Ing. Martínez is with the Subdelegado Forestal, Secretaria de Agricultura y Recursos Hidraulicos (SARH), Delegacion Estatal en Sonora, Hermosillo, Sonora, Mexico.

\*Note: edited for The Journal of the International Oak Society.