

PRESENT STATE, USE, AND PERSPECTIVES OF THE GENUS *FRAXINUS* IN MEXICO

Consuelo Bonfil

Departamento de Ecología y Recursos Naturales, Facultad de Ciencias, Universidad Nacional Autónoma de México, Ciudad Universitaria, México D. F. 04510.

To contact, call (5255) 5622-4912 or email at cbonfil@gmail.com.

The genus *Fraxinus* is found in the main mountain areas of Mexico and, like many other Holarctic genera, reaches its southern limit in Central America. The Comisión Nacional para el Estudio de la Biodiversidad reports 21 species of *Fraxinus*, but a detailed assessment of their status still needs to be done. If synonymous names are removed, there are probably 13 species and one variety of *Fraxinus* in Mexico: *F. anomalla*, *F. berlandieriana*, *F. cuspidata*, *F. dipetala*, *F. dubia*, *F. gooddingii*, *F. gregii*, *F. papillosa*, *F. pringlei*, *F. purpusii* (var. *purpusii* and var. *vellerea*), *F. rufescens*, *F. udhei*, and *F. velutina*. The presence of two of them (*F. anomalla* and *F. dipetala*) in Mexico still needs to be confirmed, and the status of *F. pringlei* is doubtful and needs revision.

Many of the species found in northern Mexico are shared with the southwestern United States (*F. anomalla*, *F. berlandieriana*, *F. dipetala*, *F. gooddingii*, *F. gregii*, *F. papillosa*, and *F. velutina*). Three other species from central/south Mexico are also in Guatemala or even Honduras (*F. dubia*, *F. purpusii*, and *F. udhei*). Only *F. rufescens* (and perhaps *F. pringlei*) is endemic to Mexico, where it grows in the central states.

Most species of *Fraxinus* are found in protected humid slopes in temperate (*Quercus-Pinus*) forests and as part of riparian vegetation, but species such as *F. udhei* are also elements of moist forests. Still others (such as *F. rufescens*) are found in the transition between temperate and tropical deciduous forests and even in xeric shrublands. *F. udhei* is the only species that has a widespread distribution in Mexico, and therefore it is the only one that has been relatively well studied. It is a common urban tree, very abundant in Mexico City and Guadalajara, where it shows a weedy behavior. Because of its fast growth and high survival rate, it is a commonly cultivated species for reforestation programs. Ecological and forestry studies of other species present in Mexico still need to be done.

The main pest of *Fraxinus* in Mexico is *Hylesinus aztecus* Wood (Coleoptera, Curculionidae), a bark beetle, which has caused large declines in urban ashes. The emerald ash borer (*Agrilus planipennis*) has not been reported in Mexico, but its rapid spread through the United States makes it very probable that it will be able to reach Mexico in the near future.