

Humboldt, with insufficient data before him, placed the lower limit of oaks on the eastern side of Mexico at 2400 feet; but subsequent explorations prove that they range, in certain districts at least, from the sea-coast up to an altitude of 12,000 feet. *Quercus oleoides** descends to the very coast in the State of Vera Cruz, forming small groves on the savanas, rarely forests. It is a handsome though small tree, and is usually covered with showy epiphytical and parasitical plants belonging to the Orchideæ, Aroideæ, Bromeliaceæ, Piperaceæ, Loranthaceæ, &c. The country rises imperceptibly from the coast, and at 2000 to 3000 feet other species of oak appear, forming small open forests. They are trees of small dimensions, having small, rigid, usually woolly leaves. *Quercus petiolaris*, *Q. tomentosa*, and *Q. affinis* are characteristic of this belt. At an elevation of 3000 feet oak trees are larger and loftier and form dense forests composed of a considerably increased number of species. Here the mean temperature is 62°·5 F., and the rainfall great. The principal species of this region are:—*Q. jalapensis*, one of the largest of Mexican oaks; *Q. alamo*, a stupendous tree with large coriaceous leaves; *Q. polymorpha*, a small species of crooked growth; *Q. lanceolata*, with willow-like leaves, and the handsome *Q. ghiesbreghtii*. They are laden with epiphytical and parasitical plants of the orders named above and others. Beneath the shade of the oaks grow various species of *Chamædorea*, and on their roots the scarlet *Monotropa coccinea* and *Conopholis sylvatica*. A variety of woody climbers of the genera *Banisteria*, *Paullinia*, *Serjania*, *Smilax*, *Rubus*, and *Vitis* connect the stems and branches and render the forests impenetrable. On the outskirts of the forest an exceedingly elegant and slender bamboo (*Arundinaria acuminata*) abounds; its tough, flexible stems rise to a height of twenty-five feet and are no thicker than a goose-quill.

Above this rich region of plants the gently sloping plains cease, the country becomes mountainous, and at 4000 to 5000 feet palms disappear and are replaced by tree-ferns. The cooler atmosphere, abundant moisture, and broken country offer the most favourable conditions for the oak, and it is here that the species find their greatest concentration in Mexico. Dense forests of numerous species clothe the mountainsides. In addition to those already named, there are many other species, some of them, like *Quercus galeottii* and *Q. insignis*, are remarkable for the very large size of their acorns. Although here as elsewhere in Mexico the oaks are evergreen, they are nearly leafless during a very short period of the year in consequence of the continued violent northerly winds. Many elegant epiphytes, at other seasons inconspicuous, come into flower at this period, and embellish the trees with bright colours. Among them are *Juanulloa parasitica*, *Columnnea schiedeana*, various species of *Echeveria*, Orchideæ, and Bromeliaceæ. At elevations of 6000 to 7000 feet pines begin to mingle with the oaks; yet the latter still predominate and constitute the bulk of the forests. The prevailing species in this region are *Quercus lanceolata*, *Q. laurifolia*, and *Q. glabrata*,

* Several of the specific names mentioned in these extracts stand as synonyms in our Enumeration.