

simplify the taxonomy of *Olea* in tropical Africa, Frances Kupicha in her treatment of *Oleaceae* for the Flora Zambesiaca, reduced all the broad leaved species to synonymy under *O. capensis* s.l. This was immediately rejected by most field botanists who felt that this was an oversimplification of the taxonomy of these taxa. Subsequently other workers at Kew attempted to reinstate the two tropical broad leaved species to subspecies of *O. capensis*, namely subsp. *hochstetterii* and subsp. *welwitschii*. This was also not accepted unanimously since it was felt that the *O. capensis* species complex was too variable.

O. europaea has become naturalized on all the continents except Antarctica. The natural distribution of *Olea* is largely occurring in Europe, Africa, Asia and Australia. The highest concentration of species is in the tropics and sub-tropics. Two centers of speciation appear to have given rise to the present species, one on south-east Asia extending south to Australia and New Zealand, and one in Africa eastwards to Arabia and India.

The genus is widely distributed in the tropical and sub-tropical regions of Africa and on Madagascar and adjacent island. It has been referred to as an ecological and chorological transgressor. Both *O. capensis sensu lato* and *O. europaea* subsp. *africana* are transgressors. *O. capensis* s.l. is represented in the Afromontane regions by distinct subspecies. *O. europaea* subsp. *africana* is absent from the lowlands for a large part of its range. Despite its widespread distribution in the lowlands, it is very much more abundant on the mountains, where it is one of the most characteristic trees of various types of Afromontane forest from Ethiopia southwards to the Cape Peninsula.

The largest of the biogeographical regions in Africa, the Sudano-Zambezian and Guineo-Congolian regions, include most of the tropical and sub-tropical areas. Scattered in these regions, principally along the eastern rift valley, are islands of Afromontane forest, which form the primary habitat of *Olea*, particularly the broad leaved species.

The most recent classification based on genetic, morphological and phylogenetic analysis recognizes six species in Africa. Some of these have named subspecies, notably *O. capensis* and *O. europaea*. The six species are:

1 *Olea europaea* subsp. *africana* (Mill.) P S Green (Wild Olive)
(National Tree No. 617)

This taxon has the widest distribution of all of the *Olea* species in Africa. It is found throughout the semi-arid regions from the southern Cape to the Mediterranean region in north Africa. *Olea. europaea* subsp. *africana* is usually a small tree in the semi-arid regions, but may be a dwarf shrub of less than 1.5 m in the more arid areas, and may become a medium sized tree of 15 m in riparian forest or along forest margins.

In parts of the south western Cape it is the dominant species with *Sideroxylon inerme*. In the light to moderately frosty parts of southern Africa it is often found in riparian vegetation which is usually a shrubby dense and rather low temperate gallery forest or bush. General species associated with this taxon in these areas are *Acacia caffra*, *Kiggelaria africana*, *Apodytes dimidiata*, *Olinia emarginata*, *Combretum eythrophyllum* and *Acacia ataxacantha*. On the highveld this taxon is usually limited to rocky ridges, sheltered kloofs, or patches of bush associated with termite mounds. It is rarely found within forests but is often encountered on forest margins. In tropical Africa it is found throughout the Sudano-Zambezian region in very much the same type of habitat as in southern Africa.

2 *O. exasperata* Jacq. (Dune olive)
(National Tree No. 619)

This species is a small multi-stemmed shrub limited to the coastal plain extending from the Cape Peninsula to the eastern Cape. It is usually found on sand dunes in close proximity to the sea. Where it does extend inland slightly it may grow into a small tree up to 9 m in height. In these circumstances it is usually associated with sheltered gulleys. On the dunes *O. exasperata* is usually associated with