NOTES ON ZAMBIAN TREES

Brachystegia spiciformis – Muputu
By Mike Bingham,
Photographs by Mike Bingham, ink drawing by Trish Bingham

Figure 1. Brachystegia spiciformis *in fresh new leaf after the passage of fire and before the first rains, Mkushi, November*

Brachystegia spiciformis, more than any other, is the defining tree species of miombo woodland, the vegetation type that dominates the south-central African subregion. Popularly known in Zimbabwe by the Shona name msasa, in Zambia it goes under a variety of names. In areas where the species is most variable the local people generally recognize the affinity of the different forms, applying the same name to them all. In orther words, they see eye-to-eye with the scientists in this matter.

The genus *Brachystegia* comprises 28 species according to Flora Zambesiaca (Vol 3, Part 2, 2007), although the precise number depends on how the species are defined. The highest concentration of species is in the northern part of the Zambesiaca Region, while a small number are confined to the lowland equatorial forests in the Guineo-Congolian region. Zambia, with 17 species, has the highest number of species.

B. spiciformis has the widest distribution of any *Brachystegia* species, ranging from the Kenyan coastal region near Mombasa to Limpopo Province of South Africa, where a small occurrence was discovered recently. In altitude it ranges from coastal to submontane at over 2000 m. on the Nyika Plateau, where it is of dwarf stature.

Some of the species of *Brachystegia, B. spiciformis* among them, are difficult to define. The number of leaflet pairs per leaf varies from 2-4 over most of its distribution range, to 5 in Kenya. There are numerous synonyms given to local varieties which were subsequently lumped together in a single species. The species with which *B. spiciformis* is most likely to be confused, are *B. floribunda*, which has leaflets in 2 pairs, occasionally 3, and of dull appearance, in contrast to the glossy leaflets of *B. spiciformis*. *B. bussei* has somewhat similar leaves, but has smooth bark.

In addition to its wide distribution *B. spiciformis* is also the most adaptable species in the genus, occurring in riverine fringing forest as well as in a variety of semi-evergreen thicket types, such as Pemba thicket in Southern Province. It does, however, require deep soil, and it generally dominates the best woodlands on the plateaus.

The species of *Brachystegia* and related genera, *Julbernardia, Isoberlinia* and *Cryptosepalum*, are invariably gregarious, usually with contiguous crowns, and they dominate the woodlands in which they occur. Monodominance, where just one canopy species forms pure stands, is not uncommon. This situation is brought about by the mode of seed dispersal, known as

Figure 2. *Young leaves and flowers, Lusaka, September*