

TREE-EUPHORBIAS AS TIMBER TREES

By P. R. O. BALLY.

Tree-Euphorbias or "Candelabrum Trees" which are so characteristic of the tropical African scenery are generally considered to be of no economic value.

It is true that native tribes have a number of uses for them.

The dried branches were used for carrying fire, for, once set alight, they continue to smoulder for many hours. The Kikuyu use the pith of the candelabrum tree as a roborant and fattening cure for old men.

The latex of many of them, diluted in water, serves for a purge for cattle and man, but it is not without danger, for it is used also in the preparation of arrow poison and for killing fish.

In parts of Central Tanganyika, the straight, light stems of a tree *Euphorbia* make rafters for native huts.

The outer portions of the branches of *Euphorbia* contain large quantities of latex contained in long, branched latex tubes which are distributed all over the plant. The latex contains starch grains, amorphous resin, mucilage, mineral salts, a viruluous resinous substance called euphorbon, and rubber.

The dried latex of certain species has for centuries been used as an energetic rubeficient or blister, but nowadays its use is restricted to veterinary practice.

During World War II, when, with the Japanese invasion of the Far East, plantation rubber had become scarce, the latex of many South and Tropical African tree-Euphorbias was analysed for its rubber content, as a possible substitute, but none of them contained rubber in sufficient quantities, besides there were technical difficulties in separating the rubber from the other constituents of the latex.

There are, however, two species of tree-Euphorbias which are of considerable economic importance: in Eritrea, a country much eroded and with very poor rainfall, there occurs *Euphorbia abyssinica* (Fig. 1) in vast numbers. It grows to a height of 40 ft. and more, with a clean bole of considerable length and diameter. The Italians soon found that the wood with its soft, parallel fibre is particularly well suited for the manufacture of matches. When dry, it burns easily and evenly. A large factory in Asmara produces matches not only for local consumption, but also for export. The boxes, too, are made from the same timber (fig. 2).

From the shavings, sawdust and other waste which are pulped and treated in a special plant, a strong brown paper is made.

Unfortunately the growth of *E. abyssinica* is very slow indeed, nor has any effort been made to regenerate the cut-out stands of the tree, and it is only a matter of time before supplies of this timber will be exhausted.

In the coastal regions of Somalia — semi-desert country except along the Juba River and along the Webi Shebelli, — the tall *Euphorbia robecchii* Pax (Fig. 3) abounds and dominates the otherwise stunted xerophytic tree growth. From its soft, odourless timber, the crates for shipping the bananas from huge plantations run by the Italians along the banks of the two rivers, are made.

E. robecchi has a particularly acrid and obnoxious latex which — even in the minutest quantities — causes virulent inflammation of the mucous membranes and a drop of which raises blisters on the skin.

Before the tree is cut, a fire is built around the base which scorches the bark and destroys the latex. The trees are then felled, the branches chopped off and left behind to be used for singing the latex of other trees.

The logs are then taken by lorry to the sawmill in Chisimaio (Fig. 4) whence the bananas are shipped to Italy, cut up into slats and made into frames for the crates (Fig. 5). The wood has to be used green, when it is tough and resilient. Once dry, it becomes brittle and loses most of its strength, so that the crates can be used for one single voyage only.

Already, the timber has to travel many miles to the factory, the neighbourhood having been thoroughly cut out, but *E. robecchi* is exceedingly common over a great portion of British and Italian Somaliland, in the Northern Frontier Province of Kenya, it extends South into the Tsavo National Park and further South into Northern Tanganyika where the most Southernly limit seems to be near Mkomasi.

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Coryndon Museum, Nov. 1953.
Photographs by the author.

EXPLANATION OF FIGURES.

- (1) *Euphorbia abyssinica* Gmel. n'r Nefasit, Eritrea.
- (2) *Euphorbia robecchii* Pax n'r Maungu, Tsavo National Park.
- (3) logs of *E. robecchii* at the sawmill in Chisimaio.
- (4) frames for banana crates, stacked at the sawmill, Chisimaio.

OBITUARY

AIR-VICE MARSHALL SIR ROBERT BROOKE-POPHAM

The Society is grieved to hear of the death of Sir Robert Brooke-Popham, G.C.V.O., K.C.B., C.M.G., D.S.O., A.F.C. During Sir Robert's stay in Kenya as Governor he was a Patron of the Society. Although war broke out during his stay in the Colony with all its complications and anxiety, Sir Robert was interested in the affairs and well-being of the Society.

H. Copley.

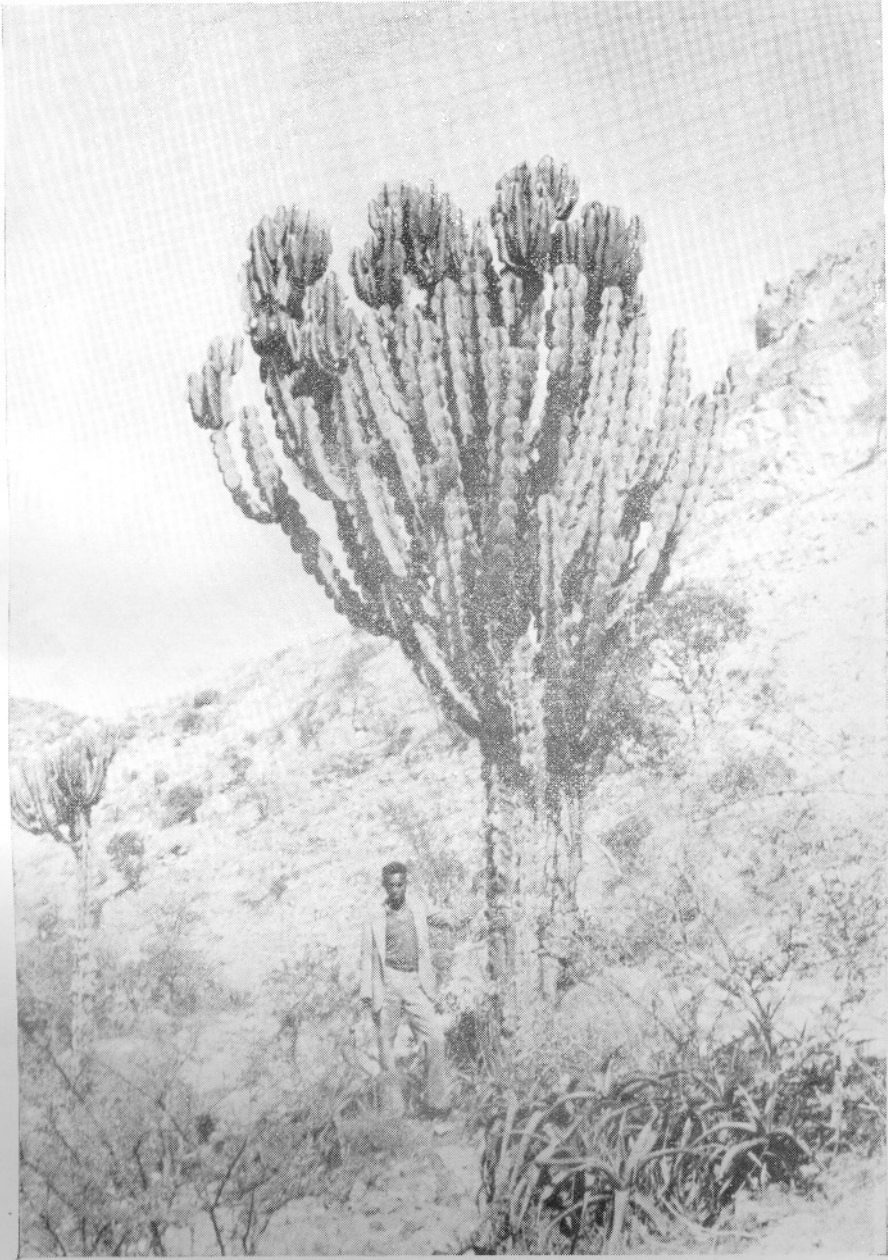


Fig. 1. *Euphorbia abyssinica* Gmel.

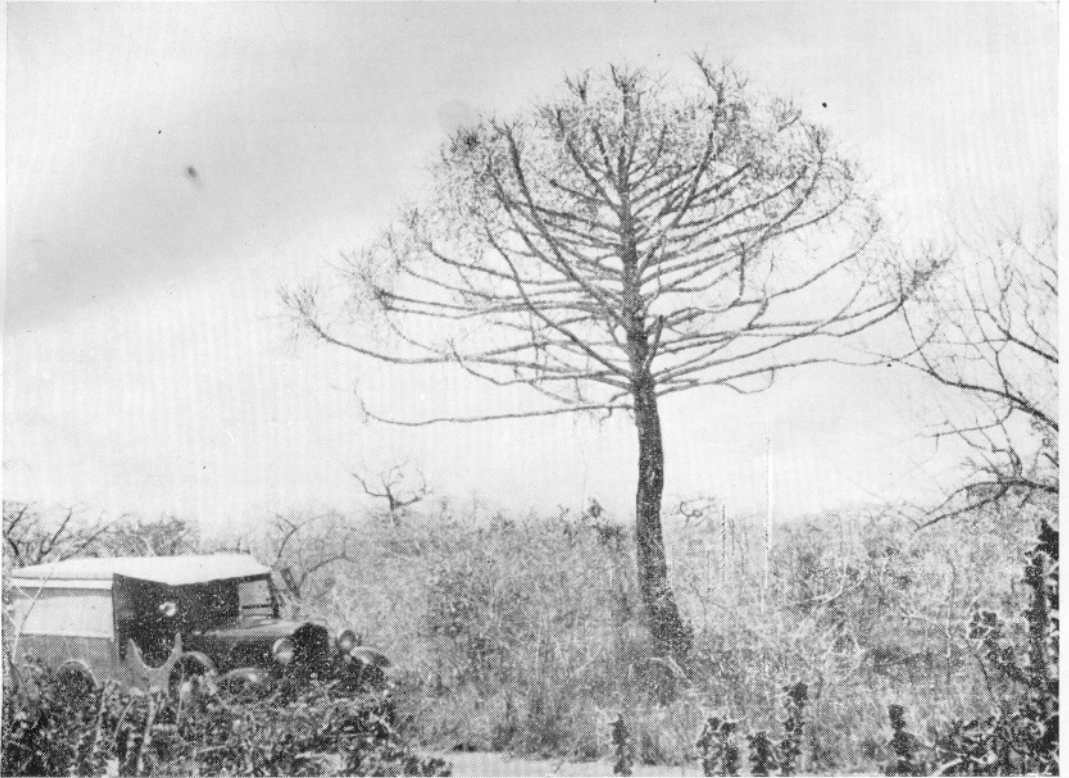


Fig. 2. *Euphorbia robecchii* Pax



Fig. 3. Making match boxes from *Euphorbia* timber in Asmara.



Fig. 4. Logs of *Euphorbia robecchii* at Chisimaio Sawmill.

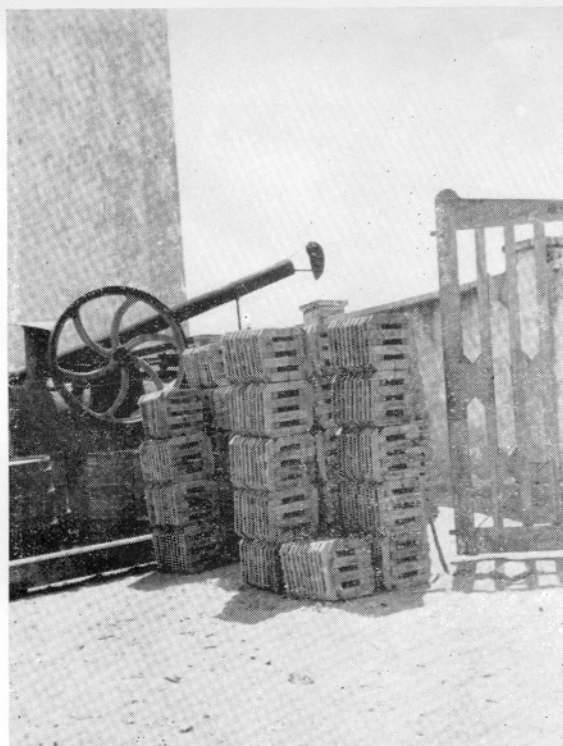


Fig. 5. Crate-frames made from *Euphorbia robecchii*.