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Notes on Indigenous Trees and Shrubs of S. Rhodesia

Oxytenanthera abyssinica (A. Rich.) Munro (Gramineae)

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Oxytenanthera abyssinica (A. Rich.) Munro
(Gramineae)

Common Name.—Bindura bamboo. **Native Names.**—Musengere, mushenjere, mushenjerere (Chis.).

General Description.—This plant, a member of the grass family, cannot be classed as either a tree or a shrub. However, on account of its interest and usefulness, it is being included with these notes. Dr. J. S. Henkel, formerly Chief Forest Officer in Southern Rhodesia, made a special study of this bamboo and published his observations in the South African Journal of Science, Vol. XXIV, December, 1927, under the title of "Oxytenanthera abyssinica (A. Richard) Munro: Occurrence, Gregarious Flowering and Natural Regeneration in Southern Rhodesia," from which much of the information for these notes has been obtained.

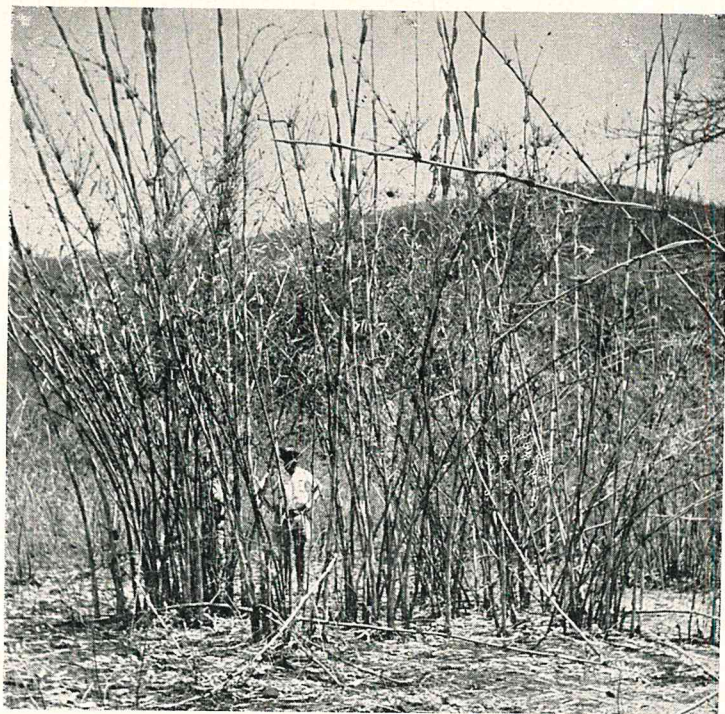
The Bindura bamboo is the only known member of the bamboo tribe indigenous to Southern Rhodesia. It occurs in clumps of varying size up to 10 feet, or even more, in diameter. These clumps may be widely spaced or may be so close as to form impenetrable thickets. Under favourably warm, moist conditions this bamboo is evergreen or more or less so, but where conditions are less favourable, e.g., areas of shallow soil or frosty areas, it is deciduous to semi-deciduous. Depending on conditions, stems vary in length from about 10 feet to 35 feet and in diameter from $\frac{1}{2}$ inch to 3 inches. Stems may be either solid or hollow. It is considered that solid stems are normally produced under low rainfall or dry site conditions. Solid stems are common. The new culms are produced during the rainy season and grow rapidly, branches being developed when height growth has ceased. The branches are in clusters arranged alternately at the nodes.

Leaves are alternate, the leaf blade being about 4 inches long by $\frac{3}{4}$ inch wide, with a rounded base and pointed tip.

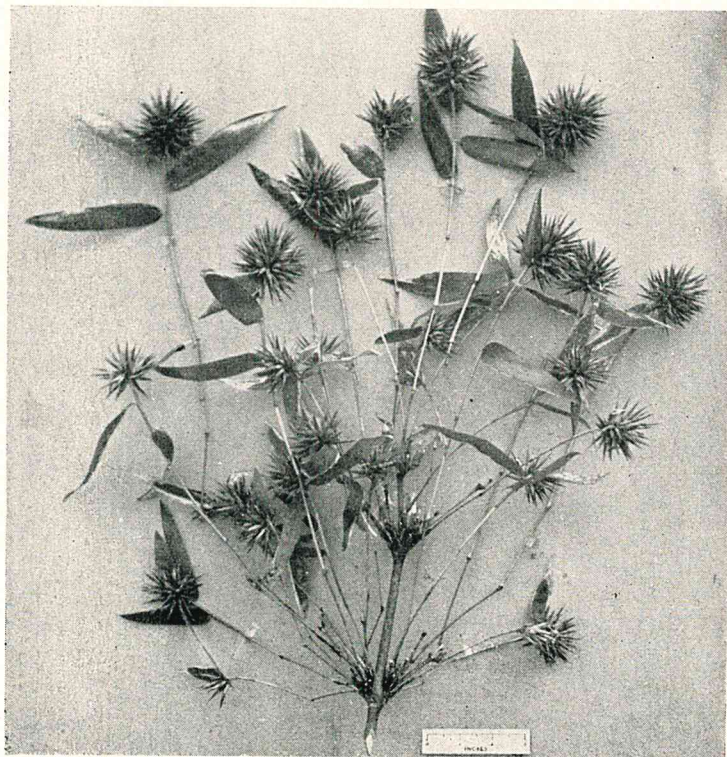
The inflorescence (not a common feature!) consists of rounded clusters, about 2 inches in diameter, of sharp-pointed spikelets.

The inflorescence is complex, the unit of the inflorescence being a small spike of flowers. The seeds, or more correctly the fruits, resemble those of oats, and are normally of high fertility. After flowering the culms gradually become leafless and bend over with the weight of the developing seeds. The plants die during the winter following flowering and seeds germinate during the ensuing rainy season. Henkel suggests that water and roaming animals doubtless greatly assist in seed distribution.

There is uncertainty regarding the length of the life cycle. From evidence so far available it is considered to be anything from 7 to 30 years. In this connection any observations regarding flowering, either sporadic flowering, when only odd plants flower, or gregarious flowering, when practically all plants in an area flower, will be welcomed by the Southern Rhodesia Forestry Com-



Oxytenanthera abyssinica
Photograph taken near Shamva during September and showing
culms almost leafless
[Photo by A. A. Pardy.]



Oxytenanthera abyssinica
Leaves and flowers from a plant near Bindura, February, 1954
[Photo by A. A. Pardy.]

mission. A case of sporadic flowering occurred near Bindura during the 1953/54 rainy season.

Distribution.—For all practical purposes the Bindura bamboo is confined to medium and lower elevations of the northern and north-eastern parts of Southern Rhodesia—e.g., the Hartley, Lomagundi, Darwin and Inyanga districts. It thrives best in moist, fertile, well-drained soil along banks of perennial or seasonal water courses and damp places at the base of hills. It also occurs on dry ridges, but under such conditions clumps are small and culms short and thin.

It occurs in adjoining territories to the north as far as Abyssinia.

A considerable area of dead clumps was noted in the Copper Belt area of Northern Rhodesia during April, 1951, which suggested gregarious flowering during the 1950/51 rainy season in that area.

Uses.—The Bindura bamboo is used for windbreaks and ornamental planting and stems are in demand for such purposes as tobacco sticks and droppers. Natives use the stems for hut-building, fences, baskets and such like purposes. It is reported that in Uganda natives use the grain as a famine food. It can be readily raised from seed, when available, which is not very often.