STERCULIACEAE

ABNORMAL FLOWERS IN *WALTHERIA INDICA*

FIG. 16.—*Waltheria indica*. 1, twig bearing normal and abnormal flowers, ×1; 2, abnormal calyx ×3; 3, normal calyx, ×3; 4, abnormal stamens, ×8; 5, normal stamens, ×8; 6, abnormal ovary, ×8; 7, normal ovary, ×8. All from *Tölken* 1224.

While revising the genus *Waltheria* for the Flora of Southern Africa, Dr Inez Verdoorn noticed a specimen (*Breyer* 21616) collected at Tokwe, in the Soutpansberg district, which appeared to represent a species distinct from *W. indica* L. On this specimen the flowers are arranged in sublax cymes up to 6 cm long, instead of forming the characteristic axillary glomerules, while the calyxes are enlarged and elongated, imparting a rather untidy appearance to the inflorescences. The ovary, instead of being broadest and more or less truncate at the top, has an acuminate oblique apex. The filaments are not united for their whole length with a membraneous tube, but only at the base, if at all. The filiform portion is pubescent and the anthers horizontal rather than erect.

On closer examination, Dr Verdoorn found that one of the lower branches of *Breyer* 21616 bears a typically congested cyme with normal flowers. It thus became clear that a new species was not involved, but that the majority of the flowers on the specimen were abnormal.

Other specimens at PRE on which all or most flowers show this abnormal development include *Tölken* 1224 (Fig. 16) from Rust-der-Winter Dam, Transvaal; and *Chase* 2328 from Sabi-Lundi junction, Rhodesia.

After dissecting several abnormal flowers, it was found that the filaments may either be completely free, united basally, united for about half their length or completely normal.

It is suspected that the abnormal development of the inflorescences and flowers of *Waltheria indica* is caused by insect activity.

M. K. Scott