GREGARIOUS FLOWERING IN THE MONOCARPIC GENUS ISOGLOSSA (ACANTHACEAE)

On p.451 of the present work I mentioned the great ecological similarity of the coastal, old dune forests at Mtunzini to the hill forests of the Malesian tropics. The gregarious occurrence of an Acanthaceous plant, probably *Isoglossa* (sterile at time of observation) is another parallel, strongly reminiscent of the stands of *Strobilanthes* species in the eastern tropics.

Strobilanthes is pluri-annual or "monocarp" ("hapaxanth"), which means that it grows for a certain number of years, 7, 9, or more after which period all specimens of a stand flower simultaneously and then die off. The seed germinates, also simultaneously, shortly afterwards and initiates a new cycle. In Asia it is found that each species has a constant life-cycle, which may run from 7–14 years.

To my satisfaction I found in the well-equipped National Herbarium at Pretoria evidence that such simultaneous flowering has been recorded in South Africa for *Isoglossa ciliata* (Nees) Lindau, e.g. at St Lucia, Zululand, May 1957 (*C. J. Ward* 3128). In the Farmer's Weekly of 4 March 1959 Mr Vic Gray called it a "honey plant" and stated that it flowered every ten years, much to the benefit of bee-keepers. In *Isoglossa woodii* this phenomenon has also been observed and Henkel, Ballenden & Bayer (1936) and Bayer (1938) noted that the interval in Zululand forests was about seven years. It has also been suggested that simultaneous flowering might occur in certain species of the genus *Hypoestes*. Gregarious flowering is usually confined to particular districts, which suggests that it is triggered off by climatic conditions, but this idea can hardly be reconciled with the fact that the period remains practically constant over long periods of observation. This points more to the existence of genetically racial populations which "keep in tune". As I have previously pointed out for *Strobilanthes* in Java (1940) and India (1942), the herbarium cannot provide the necessary observational records. It is up to the local naturalists to gather information over long periods. The reason for this Note is to encourage such observation.

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