

A NOTE ON A POSSIBLE BIGENERIC HYBRID BETWEEN *DIGITARIA* AND *ANTHEPHORA*

In 1932 Goossens described *Antheophora aequiglumis*, distinguishing it from the closely-related *Antheophora pubescens* Nees by the distinctly-elongated branches of the rachis (at least in the lower part), which are about 7 mm long, and the subequal glumes which are shorter than the lemmas which do not form a false involucre. Later in that same year, Stent (1932) recombined the species into a new genus, *Tarigidia*, which she described in order to accommodate this plant. She maintained that ". . . the structure of the spikelet is very similar to that of *Digitaria*, but the elongated lower glume and the type of inflorescence place *Tarigidia* beyond the limits of that genus". More recently, Launert (1957) described this grass as *Digitaria otaviensis*, completely overlooking *Tarigidia aequiglumis*. Subsequently in 1970 he sank his species under *T. aequiglumis*.

On examination of the type of *T. aequiglumis* and all available material, it became evident that this grass shares characters of *Antheophora* and *Digitaria*, representing a possible bigeneric hybrid between these two genera, the putative parents in this case being *Antheophora pubescens* and one of the species of *Digitaria* sect. *Erianthae*.

Tarigidia resembles *Antheophora* in having the same type of spicate inflorescence, spikelets in clusters, the production of the lower glumes, which are almost as long as the lower lemmas, and by the occasional fusion of the lower glumes. Resemblance to *Digitaria* is evident in the nervation of the lower lemma, and the characteristic flattened upper lemma with broad, thin margins. One specimen in particular, *Dinter* 5589 (collected at Otavi in South-West Africa), has the branches of the panicle produced on the lower half with the lower glumes of many of the spikelets reduced as in *Digitaria*. Here the similarity to that genus is closer than it is to *Antheophora*.

It is generally accepted today that *Antheophora* belongs to the tribe Paniceae, (c.f. Chippindall 1955; Simon 1971 and Clayton 1972) however, Tatoeka (1957) and Brown & Smith (1972) follow Pilger (1954) in keeping *Antheophora* in a separate tribe, Anthephorae.

Up to now *T. aequiglumis* has only infrequently been collected within the region of overlap of *Digitaria* sect. *Erianthae* and *Antheophora pubescens* (Fig. 6). From the number of collections of *T. aequiglumis* and from its disjunct distribution, it is evident that hybridization, under natural conditions, if occurring, is a rare phenomenon.

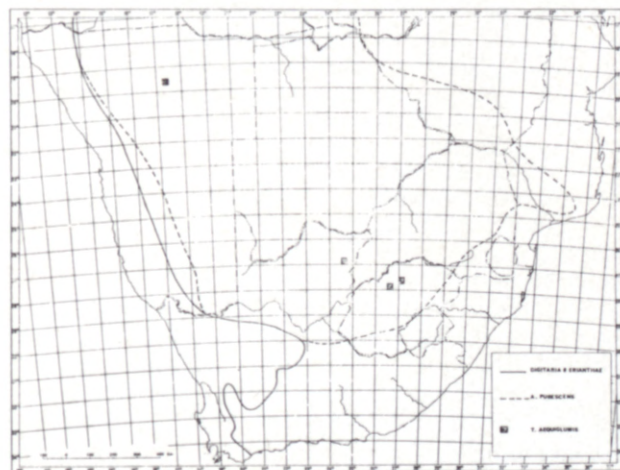


FIG.—6.—Distribution of *Tarigidia aequiglumis* within the region of overlap of *Digitaria* sect. *Erianthae* and *Antheophora pubescens*.

Attempts to hybridize *Antheophora pubescens* and one of the species of *Digitaria* sect. *Erianthae* artificially should be undertaken to show that the progeny resemble material of the presently known *Tarigidia aequiglumis*.

Material examined

S.W.A.—1917 (Tsumeb): Otavi (—CB), *Dinter* 5589. This specimen was designated as the type of *Digitaria otaviensis* by Launert (1957).

O.F.S.—2726 (Odendaalsrus): Hoopstad district, Odendaalsrus, on an empty plot (—DC), *Schultz s.n.* sub. *PRE* 8344 (PRE, holo.); 2727 (Kroonstad); Groenebloeme Station (—CA), *Potts* 2674 (PRE, para.).

CAPE.—2624 (Vryburg); 35, 2 km N.W. of Vryburg on Genesa Road (—DC), *Acocks* 12692.

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