

A NOTE ON *ERAGROSTIS ROTTLEI* (POACEAE) AND ITS LECTOTYPIFICATION

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Eragrostis rottleri Stapf is a botanically interesting rare grass. The last known collection of it was made during 1835. Nayar & Sastry (1987) say that it is presumably extinct. It is also listed as extinct by the World Conservation Monitoring Centre of IUCN during 1996 (see Walter & Gillett, 1998).

Eragrostis rottleri is a very distinct species having some resemblance to *Eragrostis minor* Host and *Eragrostis viscosa* (Retz.) Trin. It differs from *E. minor* mainly by its annual habit, complete absence of crateriform glands and absence of a beard at the mouth of the sheath (Cope, 1982; Kabeer & Nair 2009). Due to the presence of a viscid culm portion below the panicle, it can easily be mistaken for *E. viscosa*, but in *E. rottleri* the spikelets are quite different mainly in that the rachilla is persistent, the florets break from below upwards and the palea keels are scabrous. In *E. viscosa*, however, the rachilla and the florets break up from above downwards and the palea keels are distinctly ciliate.

Nayar & Sastry (1987) say that *E. rottleri* is distributed on the east coast at Tranquebar in South India. (see also Walter & Gillett, 1998). There are two sheets of Rottler's collection of it in K. The information on these sheets available in the Kew database shows that these are of two separate gatherings from Tranquebar made during 1798 and 1799. Wight's collection under the number 1785, however, gives a peculiar picture. The available collection details show that these Wight's specimens even though bearing the same number do not belong to the same gathering. This situation needs some clarification. Robert Wight, the pre-eminent military surgeon cum botanist of the East India Company had worked in the position of a Naturalist during some part of his career in India. When he joined the post, he inherited collections of Rottler, the last of the Tranquebar Brothers acquired by his predecessor. Wight also made large number of collections during his term as Naturalist and even before. Due to some misunderstanding with Lushington the then Governor of Madras the Naturalist's post got abolished. Wight preferred to go back to England on a furlough on private grounds for a period of about 3 years instead of immediately returning to military duty. Before leaving India, he shipped all his specimens to England. For the distribution of these peninsular Indian collections, Wight printed a label "Herb. Wight propr." with spaces for a number and name. However, the number given on this label is not his collection number. As Noltie (2005) says, "these are species and not collection numbers and diverse materials (localities and dates) could be lumped together if specimens are regarded as belonging to the same species".

Thus the specimens under Herb. Wight propr. no. 1785 contains a mixture of different gatherings. A close scrutiny of the information in Kew database on these specimens reveals that two of these have been collected from Mannargudi (Thiruvavur district) and Palayamkottai (Tirunelveli district), both of Tamil Nadu respectively. These are interior areas quite away from the coast. So the earlier reports on it as a coastal plant restricted to Tranquebar (Tharangampadi) need correction. The known distribution of the species in India shown in Fig.1.

Another misconception about the plant is that it is endemic to peninsular India. This view also has to be re-examined in the light of the information given by Cope (1982). While working on the Poaceae for the Flora of Pakistan, he came across a specimen, *R.R. Stewart* 26395 (K) collected from Gilgit of Pakistan, which matches very well with the type specimens of *E. rottleri*. However, he was hesitant to admit this to the flora of Pakistan based on this single collection. But the fact remains that this species has been collected from Pakistan.

LECTOTYPIFICATION

Protologue of *E. rottleri* mentions Rottler's collection from Tranquebar and Wight Herb. propr. no. 1785 without designating a holotype and as such are syntypes thus requiring lectotypification. Rottler s. n. has two



Fig. 1 : Map showing known distribution of *Eragrostis rottleri* Stapf in India

collections of two gatherings in K, and Wight's Herb. Propr. no. 1785 has 4 collections, one in K and 3 in E. Thus there are 6 syntypes for the species, the details of which are given below.

1. India: Tranquebar, 1799, *Rottler* s. n., (K000518040), image!
2. India: Tranquebar. 10.1798, *Rottler* s. n., (K000643343), image!
3. India: Peninsula Ind. Orientalis, locality?, date? *Wight* s. n., Herb. Wight. propr. no. 1785 (K000643342), image!
4. India: Tirunelveli dist., Palamcotta (Palayamkottai), 15.12.1835, *Wight* s. n., Herbarium Wight propr. no. 1785 (E00393635), image!
5. Peninsular India: locality?, date? *Wight* s. n., Herb. Wight propr. no. 1785, (E00393634), image!
6. India, Thiruvavarur dist., Munargudy (Mannargudi), 01.07.1824, *Wight* s.n., Herb. Wight propr. no., 1785 (E00393636), image!

Out of these syntypes Stapf seems to have given some importance to Rottler's collections (K) as he has named the species after him. Out of the two Rottler's specimens the one with Kew barcode no: K000518040 appears to be the better one. This sheet contains 4 specimens, 3 of which match very well with *E. rottleri*, but the top left hand specimen with contracted inflorescence branches appears to belong to some other species, probably *E. viscosa*. The specimen *Rottler* s. n. available in K with barcode no.K000518040 (excluding the top left hand specimen) is selected here as the lectotype.

Eragrostis rottleri Stapf in Hook.f., Fl. Brit. India 7: 321. 1896; C.E.C. Fisch. in Gamble, Fl. Madras pt. 10: 1827. 1934 (repr. ed. 3: 1265. 1957); Bor, Grass. Burma Ceylon India Pakistan: 513. 1960; V. J. Nair in Henry & al., Fl. Tamil Nadu - Anal. 3: 115. 1989; Karth. & al., Fl. Ind. Enum. Monocot.: 217. 1989; S. Moulik, Grass. Bamb. India 2: 606. 1997; Kabeer & V.J. Nair, Fl. Tamil Nadu: Grass.: 150. 2009.

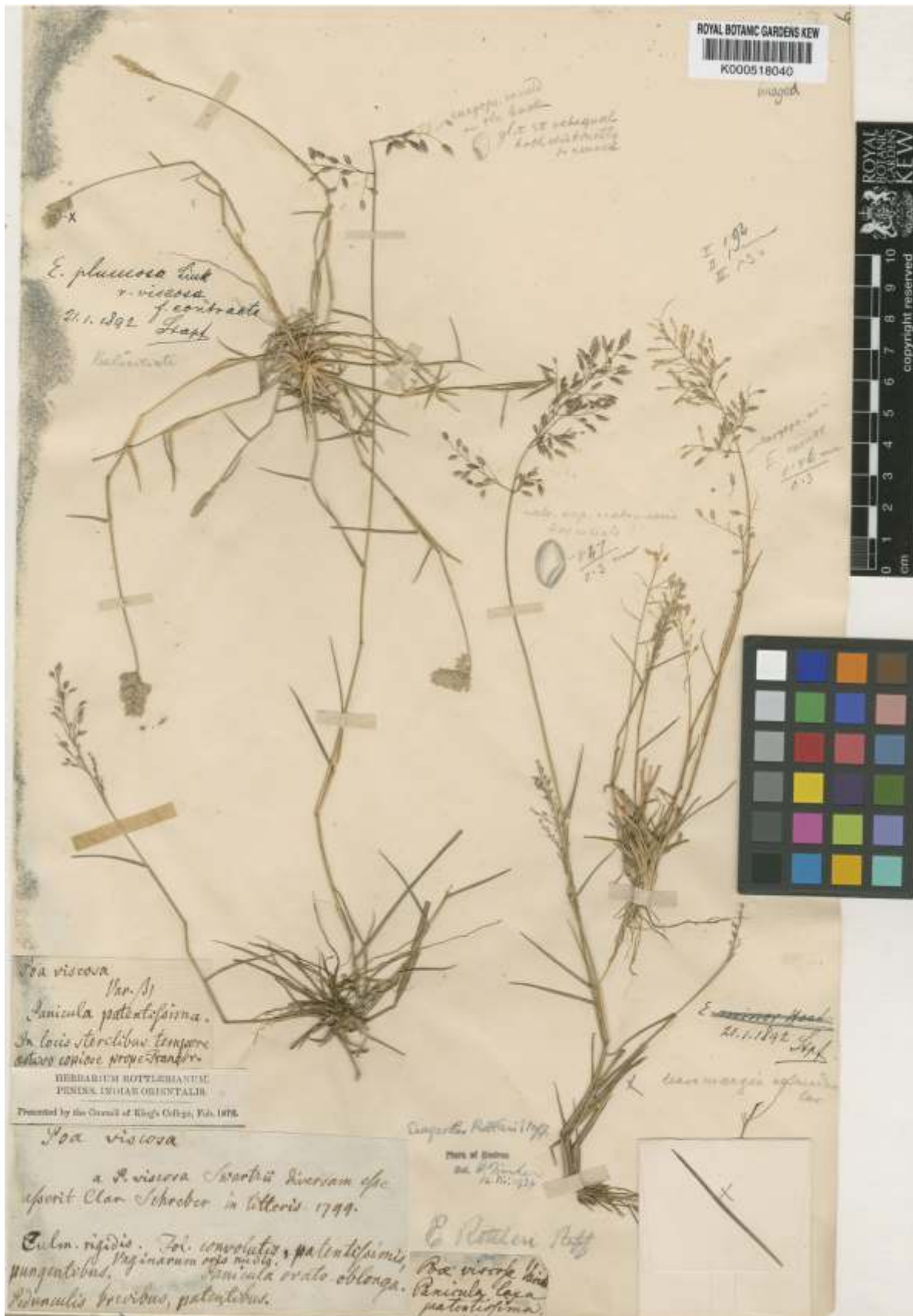


Fig. 2 : Lectotype (designated here) of *Eragrostis rottleri* Stapf - K000518040 (excluding top left specimen)

Lectotype (designated here): INDIA, Tamil Nadu, Nagapattinam dist., Tranquebar (Tharangampadi), 1799, *Rottler* s. n., K. (K000518040), excluding top left hand specimen, image! **(Fig. 2)**

Distrib. : INDIA: Tamil Nadu: Nagapattinam dist.: Tranquebar (Tharangampadi); Thiruvavur dist.: Mannargudi; Tirunelveli dist.: Palayamkottai. ? PAKISTAN: Gilgit (Cope, 1982).

It is strange that this plant which has been collected a few times from 3 isolated localities in peninsular India and that too during different years (1798, 1799, 1824, 1835 etc.) and possibly also from Gilgit in Pakistan could not be relocated after that. A thorough search was unsuccessfully made in Tranquebar (Tharangampadi) and near about areas for this species. Similarly critical examination of the specimens of related species in CAL, MH and FRC also did not yield any positive result.

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