

## Relocation of *Hubbardia heptaneuron* Bor, from its type locality

*Hubbardia*, a monotypic grass genus was first collected in 1919 by L. J. Sedgwick from Jog Falls (Shimoga District, Karnataka). It was described by Bor in 1951 when Santapau placed Sedgwick's collection at his disposal. Bor named it in honour of his colleague Charles Edward Hubbard, a well-known English agrostologist. In fact he erected a new tribe Hubbardiaceae with *Hubbardia* being the only genus in it. *Hubbardia heptaneuron* Bor was collected only on two occasions clinging to spray-moistened rocks near the famous Jog Falls on the Sharavati river, which formed the boundary between the states of Bombay and Mysore (now Maharashtra and Karnataka). These

had been collected by Hallberg and McCann in the same month and year as Sedgwick's collection<sup>1</sup>.

The species was declared to be possibly extinct after construction of the dam on the Sharavathi and the drying of the Jog Falls in summer. This unique grass species was then collected from Tillari Ghat (15°48'83"N and 73°10'42"E), a location other than the type locality in Kolhapur District, Maharashtra. Initially the grass was located in the ghat region along the roadside on about 1 m<sup>2</sup> wet rock, in a shady place at about 500 m altitude. Intensive search during consequent years in other ghats as well as the type locality to locate the grass species

failed. However, it was found growing in some other locations in the Tillari region. It is a rare grass favouring moist rocks in shady places and grows on wet hanging rocks in the ghat areas. It closely resembles *Arthraxon jubatus* Hack and exploits the same ecological niche. In 2006 the Department of Biotechnology (DBT), New Delhi initiated a research programme on the restoration of this species which includes collaborative efforts from Shivaji University, Kolhapur; ATREE, Bangalore and Forest Department, Pune. This has led to successful reintroduction and establishment of more than 5000 individuals of *H. heptaneuron* in 16 ghat regions at 108 locations<sup>2</sup>.

In a similar attempt to reintroduce this species and monitor the progress of previously planted material in type locality, i.e. Jog Falls, we accidentally came upon natural populations of *H. heptaneuron* (Figure 1) (18 January 2010, 14°13'524"N and 74°48'578"E, 411 m amsl). It was found growing in close association with *Arundinella pumila* (Hochst ex A. Rich.) Steud. This relocation took a long gap of 90 years. The populations from type locality do differ from the ones in Tillari Ghat. The glumes of the former seem to be more hairy than the latter. Apart from this difference, the habitat of the species in type locality hints that the species does not occur exactly near the Jog Falls or in the falls itself but it occupies slopes/hanging rocks near the falls which are densely covered by vegetation. This may be the reason why *H. heptaneuron* could not be relocated by plant explorers as the literature refers to Jog Falls as its locality.



**Figure 1.** a, *Hubbardia heptaneuron* Bor, as seen in flowering at Tillari Ghat (MS). b, *H. heptaneuron*, recently relocated from its type locality, Jog Falls (KA). c, GPS marked type locality.

1. Bor, N. L., *Kew Bull.*, 1950, **5**, 385–388.
2. Yadav, S. R., Chandore, A. N., Nimbalkar, M. S. and Gurav, R. V., *Curr. Sci.*, 2009, **96**, 880.

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