called as 'Jamar'. Their leaves are employed for preparation of brooms.

The forest guide of Kukuchina revealed that there was an abundant growth of these palms until ten years back when a number of them succumbed to the forest fire leaving the hardy ones. The type locality of this species is probably 'Takal' situated near Kalamuni pass, between Kalamuni pass and Munsai in Pithoragarh region of Kumaon Himalayas where palms have been noted in abundance. Taller, profusely flowering and fruiting palms are found in Chaubattia gardens at Ranikhet, Almora district, where taller tree trunks are devoid of the mantle of leafsheath fibres at the base. The palm has almost naturalized here with seedlings of various ages found growing in shades of Quercus incana associated with Cedrus deodara and Asculis indica. The superintendent of Chaubattia gardens has been informed about the importance of this species and the strategies to be adopted for its conservation.

The mature seeds of this palm germinate readily under nursery conditions in well-drained porous soil and the seedlings are surviving satisfactorily in the departmental glass house.

There is some confusion in the literature about *T. martianus* Wendl., a more widely distributed tropical Himalayan species and *T. takil* Becc.<sup>1.2</sup>. The description and localities of both these are mixed up. The species is close to *T. fortunei* (*T. excelsa*) from which it can be readily distinguished<sup>1</sup>.

- 1. Beccari, O., Asiatic Palms-Corypheae (ed. Martelli, U.), Ann. R. Bot, Gard (Calcutta), 1991, 13, 1-356.
- 2. Blatter, E. S. T., The Palms of British India and Ceylon, Oxford University, London, 1926.

A. R. KULKARNI B. S. PAWAR

Department of Life Sciences, University of Bombay, Bombay 400 098, India

## T. S. Rana et al.'s reply:

It is certainly heartening to know the existence of one more population of this rare palm (*Trachycarpus takil* Becc.) in wild state in Badkot forest of Almora District. Kulkarni and Pawar are to be commended for this search.

However, they are not correct in stating that the type locality of this palm is 'Takal' which, according to them, is 'probably' situated near Kalamuni pass, between Kalamuni pass and Munsai. As such, there is no place like Munsai in Pithoragarh but it could be Munsiyari, where they have stated to have noticed these palms in abundance. But no such population could be noticed during our surveys (one of the authors of the paper happens to belong to this area). Kulkarni and Pawar are perhaps not aware of a

publication by Gibbons<sup>1</sup>. Gibbons has also clearly mentioned in his article 'Thalkedar' rather than 'Thakil' and not 'Takal' as stated by Kulkarni and Pawar. Further, Gibbons has stated that Thalkedar lies south of Pithoragarh town, some 15 km away. Thus, there is no confusion regarding its type locality. In our paper we had stated that we could not locate any mature palm trees in that area except for a few hundred seedlings. But in our subsequent survey during July, 1994 we could also locate five adult trees of T. takil in the same locality as mentioned by Gibbons. The trees in Chaubattia gardens at Ranikhet have been planted as stated by Kulkarni and Pawar.

We, therefore, reaffirm our conclusion as regards the type locality of this rare palm in India. However, more studies, particularly on the taxonomy of this as well as the allied species (*Trachycarpus fortunei* H. Wdl. and *T. martianus* H. Wdl.) can throw more light on this topic.

1. Gibbons, M., Principes, 1993, 37, 19-25.

T. S. RANA
TARIQ HUSAIN
R. R. RAO

Taxonomy and Herbarium Division, National Botanical Research Institute, Lucknow 226 001, India