# letter to the editor

## FLOWERING IN BAIJJYA BANSH

Seven bamboo clumps, locally known as Baijjya bansh, (*Bambusa vulgaris* Schrad.) flowered in the village Faridarpara near Bardarhat area of Chittagong town. Flowering started during February, 1979 in all these clumps. Out of the seven clumps, five flowered completely and died within 18 months. The remaining two clumps were found to be part-flowering in nature and were still in healthy and green condition, even after three years of flowering. Flowering which started during February, in both the part - and the complete-flowering clumps continued till August-September with a pause from October to January. Flushes during flowering period were not purely continuous but it alternated with short interflushing gaps of 5 to 12 days.

Inflorescence is a large leafy compound panicle 10 to 45 cm long ; sometimes attaining 50 to 120 cms when produced on the injured or broken culms. It is produced directly on culm nodes (even at the base, excepting 2 basal nodes), as well as on branch nodes. Spikelets are compresed, 3 to 19 in number and 1.0 to 1.8 cm long, with 4 to 6 flowers. Anthers are visible from a distance due to their bright purple colour.

Part-flowering clumps have been producing new culms every year and most of their branch bases in the mid-culm zones possess aerial roots. Culms, upto one year of age, mostly had nodal adventitious roots developed from 1 to 4 basal nodes. Both the types of

roots were found alive on culms upto one year of age only. In general it was found that complete-flowering clumps did produce neither new culm nor any aerial roots at the branch bases.

It was learnt from an old villager that all the five complete-flowering and part-flowering clumps had been planted from two completely different stocks through offsets. It was interestingly noticed that these flowering clumps did not produce any seed ever and no seedling was found on the ground nearby. From these information it seems probable that this species has two genetical or physiological strains — one is part-flowering and the other is complete-flowering.

In 1898 Moebius reported flowering of *Bambusa vulgaris*, which did not also produce any fruits. McClure, from his personal experience and from the "Notes on Javanese Bamboo species — Hilde brand, 1954", has pointed out in "The bamboos — A fresh perspective (1967)", that the flowering in *Bambusa vulgaris* involved at the most only a few 'plants' and always died without producing fruits. He also noted that this species remained steadily in a vegetative state without any fertile sexual phase since the date of scientific description and naming (Wendland 1810). The geographical origin of this bamboo is still a matter of conjecture. According to Trimen (1900), Kurz regarded it as indigenous to Java and Thwaites and treated it as a native to Sree Lanka. This plant might have been introduced in Bangladesh in the long past and thereon became common and major cultivating bamboo in the villages. As per report and my personal observation the plant died leaving no 'seedling progenies' behind. It appears that probably this important bamboo is gradually becoming an endangered species. Fortunately, this species, so far known, is not gregarious-flowering in nature and the systematic sensecence of this sterile (?) plant is not yet known. Though in recent time this bamboo has not been perpetuating sexually, yet it is today one of the most vigorous of known bamboos.

However, for the sake of protecting and preserving this species, investigations of the self-sterility, continuation of observation on part-flowering clumps and studies on the possibility of its hybridization with other fertile species of bamboo are to be undertaken immediately.

**Ratan Lal Banik**
Divisional Officer
Silviculture (Genetics) Division
Forest Research Institute
Chittagong.