

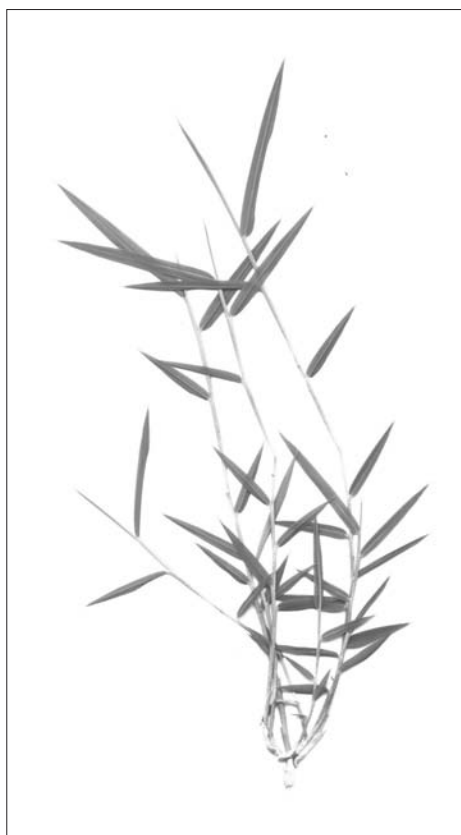
# The flowering of bamboo

Derrick Rooney

The flowering and subsequent life cycles, if any, of the bamboos are not well studied, possibly because bamboos don't flower very often, and when they do, they mostly die.

To get a handle on how often bamboos flower in gardens, consider the fact that the main botanical classifications of these plants are not based on the flowers and fruits, as is usual in taxonomy, but on vegetative characters: stems, leaf-sheaths, leaf-blades, and so on.

In the case of a South American forest bamboo, *Chusquea couleou*, one of the few frost-hardy Southern Hemisphere bamboos, there has never been an alternative. It has been cultivated in Britain and elsewhere since the 19th century, and in 150 years or more has not flowered.



*The Chilean Chusquea couleou, which has been in cultivation in Britain since the 19th century and has never flowered there. My plant is now at least 25 years old, and it too has not flowered.*

The elegant Himalayan bamboo, *Himalayacalamus falconeri*, flowers in cultivation every 19 to 25 years, then dies after shedding seed. If some of the seeds germinate and survive the first winter, the species carries on. If not, it's bye, bye, bamboo. In 1998, this species flowered and died in gardens throughout Canterbury, including my own. My specimen was 22 years old.

*Phyllostachys*, another bamboo genus with several frost-hardy species, has been grown in New Zealand gardens, and as shelter belts in the north, for many decades, probably since the 19th century, but until about 1998 no flowering specimens had been collected in this country. I caused some consternation in the Landcare Research herbarium at Lincoln by presenting the staff with a four-metre flowering stem from my plant of *P. nigra* var. *henonis*. The same plant flowered at the same time in another garden 30 kilometres away, but *P. nigra* itself, also growing in both gardens, did not, and has not.

Late in the 1998 autumn, after the seed had shed and the spent stems had browned off, I cut them down and grubbed out the stumps. Two down, two to go. I planted a smaller *Phyllostachys* species to fill the gap. What were the odds against the replacement also flowering, within nine months and on the same site? Astronomical? But that's exactly what happened.

While all this was going on, a third *Phyllostachys* species, growing in an extra-large planter bag while I pondered a final site for it, also ran up to flower, and died. That solved the problem of where to put it.

Within 18 months, then, four bamboo species flowered in my garden. This is more than most gardeners can expect to see in a lifetime. I'd like to be able to say that I learned a lot from this rare event,



*Phyllostachys nigra* var. *henonis* in flower

but all it really did was remind me of what I knew all along: that although the bamboos have woody stems and you have to look among the shrubs for them in garden centres, they are really just giant grasses, some monocarpic and some not. (Monocarpic is a botanist's adjective for plants that grow up, flower once, and then die). Their life cycle makes them a sort of horticultural equivalent of a salmon.

I'd like, also, to be able to say that the flowers were exciting, but in fact there wasn't much to them. If I hadn't known what to look for, I might not have noticed them at all. They were inconspicuous; a bit like most other grass flowers, really. They might have excited taxonomists, but to a horticulturist they were almost a non-event.

An interesting and, as it happened, inconvenient, side effect occurred in the following summer. The grubbed-out *Phyllostachys* made the greatest comeback since Lazarus. Somewhere beneath the mass of dead crown and stubs, dormant buds sprouted fresh, green shoots. These are vegetative, not flowering, stems. Clearly this is one of the minority of bamboos that do not die after flowering, and its regrowth is smothering the other things I planted in its presumed gap.