



DRAFT

**Himalayacalamus hookerianus (a new combination) in flower in Edinburgh**

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The species which Munro named *Arundinaria hookeriana* is presently in full bloom in RBG Edinburgh. It had been unlabelled or mis-identified for a long time (names included *Arundinaria falconeri* and *Chimonobambusa falcata*), but comparison of its flowers with those of the type at Kew and with some new collections from Darjeeling has allowed its real identity to be confirmed.

Analysis of the flowers has also shown that it belongs in the genus *Himalayacalamus* rather than *Drepanostachyum*, and a new combination is given below. Not only are the spikelets usually composed of only one fertile floret, which is how Keng defined the genus, but in addition this species has several other vegetative characters which reinforce its position in *Himalayacalamus*, rather than *Drepanostachyum*. These include small leaves, a glabrous culm sheath ligule interior, less than 30 branches, and a gradual reduction in internode length towards the culm base. *Drepanostachyum* species are from sub-tropical parts of the Himalayas from 3,000 to 6,000 ft, where there is negligible frost. Plants of *D. falcatum* at Kew, collected near Pokhara by Tony Schilling, are cut to the ground by frost each winter. *Himalayacalamus* species are from the warm temperate zone, between 5,000 and 8,000 ft. Foliage of *Himalayacalamus* species such as *H. falconeri* and *H. hookerianus* will survive all but the coldest winters outside in many parts of the UK including Scottish coastal areas.

***Himalayacalamus hookerianus* (Munro) Stapleton comb. nov.**

Basionym: *Arundinaria hookeriana* Munro in Trans. Linn. Soc. 26: 29 (1868)

*Chimonobambusa hookeriana* Nakai in J. Arn. Arb. 6: 151 (1925)

*Drepanostachyum hookeriana* (Munro) Keng in J. Bamboo Res. 2(1): 17 (1983)

*Sinarundinaria hookeriana* (Munro) Chao & Renvoize in Kew Bull. 44(2): 358 (1989)

Type: Sikkim, Yoksum *Hooker* (K)

In the temperate palm house in Edinburgh this beautiful species with its delicate foliage reaches 13 m in height and a dbh of 4 cm. Outside it has only reached 4 m and 1.5 cm dbh. In its natural environment it reaches around 6 m height and 2.5 cm dbh, and at an altitude of about 7,500 ft in Nepal the culms are a striking purplish-blue colour. The

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culms of the indoor plant in Edinburgh remain a slightly glaucous green, while those outside have been blasted by the Scottish winter to a fiery orange-red. It would be interesting to see whether a milder winter climate would lead to a pleasant purple-blue colour as seen in Nepal, and seedlings of this plant will hopefully be raised at Logan and Younger Botanic Gardens on the west coast of Scotland, along with new material from East Nepal which may have a stronger blue colour.

The clumps in Edinburgh have apparently been flowering for a few years. The indoor plant is still vigorous, with much of its foliage remaining, while the outdoor plant is on its last legs. A substantial amount of seed is being produced by both clumps, and a few seedlings have germinated naturally under the clump in the palm house. Seed collected from these clumps is germinating very slowly, with 20% germination after 3 months but with a further 40% still looking healthy. There is a very similar plant in the temperate house in Kew, labelled *Sinarundinaria falcata*, which is not in flower.