



## **Dendrobium Mari Marutani, UH1420**

*Dendrobium superbiens* (an amphidiploid with *PPCC* genome constitution) was crossed to *D. Manoa Beauty* (*PPPP*-type genome constitution) on February 6, 1991. The relatively uniform *PPPC* offspring (K1420) began to flower about 25 months after germination. The attractive dark purple-violet flowers are large and full, measuring about 3 inches across with overlapping sepals and petals. About 12 flowers are carried on erect flower stems. The average height of pseudobulbs at first flowering was 9½ inches, and after the third year of flowering was 26½ inches. Flowering peaked from July through December (see chart). Bud drop percentage was low (under 3%), and the half-life of sprays on plants was about 60 days. The half-life of sprays on plants is the number of days it takes for half of the flowers on the spray to wilt or drop. The cross, K1420, was registered with the International Orchid Registrar as *Dendrobium Mari Marutani*.



The major attributes of ‘Mari Marutani’ are the relative uniformity of the seed-propagated progeny, the attractive dark purple-violet flowers with overlapping sepals and petals, the low bud drop (2.5%), and the long half-life of sprays on plants (about 60 days).

Seed pods of ‘Mari Marutani’ have been released to dendrobium growers’ associations in Hawaii for trial, particularly as a flowering potted plant.

*H. Kamemoto, A. R. Kuehnle,  
T. D. Amore, and N. C. Sugii*  
*Department of Horticulture*

### **Characteristics of *Dendrobium Mari Marutani* (linear measurements in inches)**

Flower color (RHSCC)	Red-purple (80A)
Flower width	2.4 ± 0.1
Petal length	2.9 ± 0.2
Petal width	1.6 ± 0.1
Dorsal sepal length	1.4 ± 0.1
Dorsal sepal width	1.4 ± 0.1
Pedicle length	0.7 ± 0.1
Scape length	1.7 ± 0.2
Raceme length	7.3 ± 1.1
Flowers per spray (number)	20.4 ± 3.1
Bud drop (%)	11.7 ± 4.3
Sprays per plant (number)	2.5
Half-life of sprays on plant (days)	6.1 ± 2.2
Pseudobulb height at first flower	62.0 ± 22.
Pseudobulb final height	9.4 ± 1.9
	26.6 ± 4.9

The genome make-up of *D. Mari Marutani* (*D. superbiens* × *D. Manoa Beauty*) is similar to that of *D. Pompadour* (*D. Louis Bleriot* × *D. phalaenopsis*), an important cutflower cultivar in Thailand. *Dendrobium Mari Marutani* has one chromosome set of *D. discolor* contributed by amphidiploid *D. superbiens* and three sets of essentially *D. phalaenopsis* chromosomes contributed by *D. superbiens* and *D. Manoa Beauty*, while *D. Pompadour* has one set of *D. discolor* chromosomes contributed by an unreduced egg from triploid *D. Louis Bleriot* (*D. superbiens* × *D. phalaenopsis*) and three sets of *D. phalaenopsis* chromosomes contributed by *D. Louis Bleriot* and *D. phalaenopsis*. A significant difference between the two cultivars is that ‘Mari Marutani’ is seed-propagated, whereas ‘Pompadour’ is clonally propagated.

**Monthly yield of *D. Mari Marutani* based on 25 plants.**

