

'Concetta' Rose

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'Concetta' is a fluorescent, orange-colored rose suitable for pot forcing, landscape planting, and fresh or dried commercial cut flowers (Fig. 1). It produces few thorns and can be propagated from three-eye softwood stem cuttings or through tissue culture.

Origin

'Concetta' (Papconc; originator or breeder, can be used for a trademark) arose as a sport (chimera) on the floribunda rose 'Gabriella' (Berggren), which was a mutation of 'Mercedes' (R. Kordes) (Krussmann, 1981). 'Mercedes' is a floribunda rose from a cross of an unnamed seedling with 'Anabell' (Kordes) (Krussmann, 1981).

Culture

Initial propagation was from three-eye softwood stem cuttings, which rooted readily under intermittent mist. The bottom part of the stem was dipped in 0.3% 1-indole-3-butyric acid hormone powder. Over the last 8 years, repeated stem cuttings from the original sport and daughter plants have displayed stable characteristics.

Tissue culture of axillary buds was also successful, in the four years of university research and in a commercial laboratory. Tissue culture protocol followed was that of Skirvin and Chu (1981). During tissue culture, a low mutation rate (1% to 10%), specifically albino flower color, was noted.

All plants were planted in 18-liter containers in a 2 soil : 1 peat : 1 perlite mix and grown in a glass greenhouse. Each week, the plants received 20N-13P-8K fertilizer at 300 ppm N. Plants were allowed to flower continuously. New flowers formed every 5 to 8 weeks, depending on the season. Plants were cut back once a year in December.

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Description

'Concetta' is a dense, shrubby rose with an upright growth habit. Overall height at maturity is \approx 1 m. The general flower color is an unusual glowing orange that may appear similar to that of 'Mercedes'. 'Concetta's color, however, is different and is classified as orange-orange, PMS 172 (Pantone, 1985), rather than the orange-red typical of 'Mercedes'. Additionally, 'Concetta' is more floriferous, with most flowers borne singly. It is classified as a hybrid tea due to its flower shape and petalage, grows well on its own roots in the greenhouse or outside, has few thorns or prickles, and produces a superior warm-red dried flower.

The flower buds are small, initially unshaped, becoming high centered as the petals curl outward. The petals are thick, ruffled, and, on maturity, reflexed with a velvety inside and smooth outside. Petal number is usually \approx 32 (mean of 19 flowers) with a range of 26 to 35 per bud. The flowers measure 5.0 to 6.3 cm across and have a slightly fruity fragrance.

The foliage is medium sized and com-

pound (five to seven leaflets). It is leathery and semi- to glossy green. Each leaflet is oval, acuminate, and finely biserrate.

Performance

All observations for disease on 'Concetta' were made under greenhouse conditions. Tolerance to powdery mildew [*Sphaerotheca pannosa* (Wall ex. Fr.) Lev.] and blackspot (*Diplocarpon rosae* Wolf.) was good under normal spray and nonpreventive programs (spray applied once disease was noted). No other diseases were observed.

Mulched, pruned plants (canes of 15 to 20 cm covered with leaves and enclosed in chicken wire) survived without injury for two winters at the Lincoln (Nebraska) Horticulture Research Garden [U.S. Dept. of Agriculture zone 5 (Cathey and Heriteau, 1990)].

Availability

The 'Concetta' rose was patented on 25 Apr. 1989 as U.S. Plant Patent no. 6749. Propagating stock, tissue culture plants, or dried flower samples for potential licensees are available by contacting E.T.P.

Literature Cited

- Cathey, H.M. and J. Heriteau. 1990. Mapping it out. *Amer. Nurseryman* 171(5):55-63.
Krussmann, G. 1981. *The complete book of roses*. Timber Press, Portland, Ore.
Pantone. 1985. *Pantone color formula guide*. 18th ed. Pantone, Moonachie, N.J.
Skirvin, R.M. and M.C. Chu. 1981. *Tissue-culture propagation of greenhouse roses*. Univ. Illinois Coop. Ext. Bul. FL-14-81.

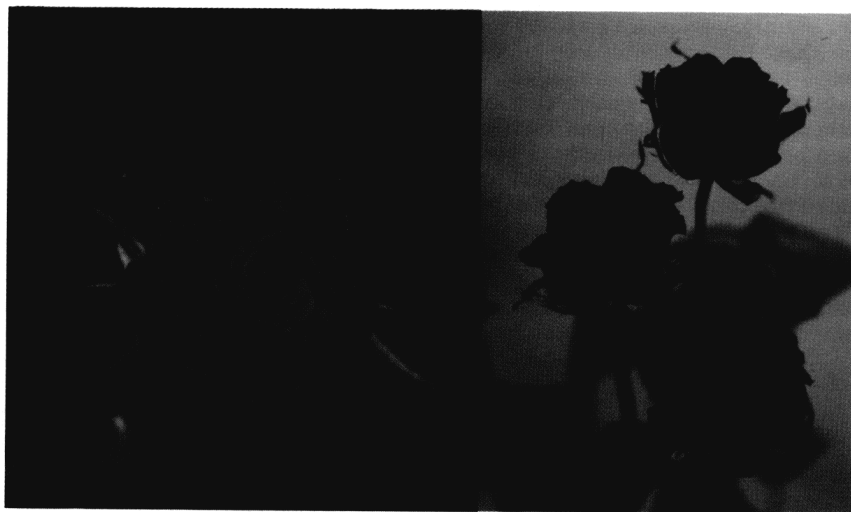


Fig. 1. The 'Concetta' rose fresh (left) and dried (right).