

Tetraploid Induction by Colchicine in *Rosa bracteata*[®]

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Rosa bracteata is the only species in the genus *Rosa* that lives in subtropical areas — Okinawa in Japan to Vietnam — and has heat tolerance. Modern roses for cut and potted flower production do not have heat tolerance, with flowering and vigor declining during the summer season, because modern roses were bred from wild species living in temperature zones. In this study, we tried breeding modern roses with heat tolerance by crossing to *R. bracteata*. As the chromosome number of modern roses is $2n = 4x = 28$ and *R. bracteata*'s is $2n = 4x = 14$, the F1 by crossing between those will have chromosome number of $2n = 3x = 21$ and will not have fertility. So we attempted to induce a tetraploid form of *R. bracteata* with colchicine.