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Influence of 2°C Increase under Controlled Air Tem Physiological Fruit Drop in *Citrus*

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We studied the influence of a 2°C increase in air temperature on phy *Citrus* using a growth chamber for two months after full bloom. On chamber was maintained at the standard temperature (control), whi

maintained at 2°C higher than the control (+2°C treatment). The av
changed every ten days. In ‘Okitsu wase’, ‘Ishiji’, ‘Shirakawa’ Sats
unshiu Marcow.), and ‘Shiranui’ [(*Citrus unshiu* Marcow. × *C. si*
reticulate Blanco], physiological fruit drop occurred more intensive
than in the control after 10–20 days of full bloom. At the end of the
physiological fruit drop ratio in plants receiving +2°C treatment was
controls for ‘Okitsu wase’ and ‘Ishiji’. In ‘Miyagawa wase’ and ‘Sa
mandarin, in which number of fruit was controlled by artificial fruit th
fruit drop also occurred more intensively in plants receiving +2°C tr
after 10–20 days of full bloom. Especially in ‘Sasebo unshiu’ at the
period, the difference in the physiological fruit drop ratio between p
treatment and controls was larger (26%) than that in ‘Miyagawa wa
wase’ and ‘Sasebo unshiu’ fruit diameter of plants receiving +2°C t
that of controls. These findings suggested that with acceleration of fr
physiolosical fruit drop were both promoted by a 2°C increase in air
bloom.

Key Words: fruit enlargement, phytotoron, Satsuma mandarin

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