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Investigation of Reagents for Overcoming Apple Sel on Pear Fruit Setting

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Effect of two kinds of Apple plus (No.4 and No.6), reagents develc apple self-incompatibility by inactivating stylar *S*-RNase, on fruit set Japanese pear 'Kousui'. First, the inhibitory action of Apple plus o proteins prepared from 'Kousui' style was monitored. Both reagen activity dose-dependently; Apple plus No.4 and No.6 lowered the a

the control at 0.1 and 1%, respectively. Next, the promotive effect on fruit set in self-pollinated ‘Kousui’ flower. When the trees were before anthesis at 0.1 or 0.5%, all treatments caused 10-40% fruit 0.5% Apple plus No.4 one day before anthesis was most effective, weeks after pollination. However, Apple plus at a concentration hig injuries to flowers and young leaves, and did not show sufficient frui intact seeds at harvest was 0 to 3 in fruit induced by Apple plus, in cross-pollinated fruit. Apple plus also produced fruit in non-pollinat that the reagent induces not only partial breakdown of self-incompa parthenocarpy in ‘Kousui’ pear. The fruit induced showed considera weight was about 70% of the fruit obtained by cross-pollination at that overcoming self-incompatibility by Apple plus is insufficient and the present form, will not be useful in practical culture of the pear.

Key Words: fruit quality, heavy metal salt, *S*-RNase

[PDF (580K)] [References]

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