

Title: Effect of developmental stage and medium on embryo culture of low chill peach hybrids

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Effect of developmental stage and medium on embryo culture of low chill peach hybrids

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Abstract

The main objective of the present programme was to widen the varietal range of early ripening peach cultivars. Crosses were made between Shan-i-Punjab x Florda Prince, Shan-i-Punjab x Flordaglo and Shan-i-Punjab x Prabhat. The embryos of these crosses were rescued after 65, 75 and 85 days of crossing and cultured in MS basal medium supplemented with varying concentration of BAP (0 to 2mg/L) and IBA (0 to 1mg/L). After stratification at 4°C embryo cultured tubes were transferred to a growth chamber at 24 ± 2°C for germination. Seeds harvested at 85 days after crossing showed maximum embryo germination (75.26 %). Among these crosses, Hybrid-3 (Shan-i-Punjab x Prabhat) showed maximum germination (81.66%) in M₂ medium (MS medium + BA 0.25mg/L + IBA 0.05mg/L) when rescued after 85 days of pollination and embryos harvested at fully matured stage (85 days after pollination) took minimum days to germinate.

Key words: Growth stages, media, embryo germination, low chill peach hybrids

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