

Abstract:

This study was conducted to investigate the effect of stage of mango fruit development and decortication on seed germination, polyembryony and growth of seedlings of Kitchiner (Baladi) cultivar. The treatments consisted of dividing the seeds, which were obtained from three different fruit stages (green mature, ripe and over ripe), into two lots. One lot of seeds was decorticated and the other one was left intact (undecorticated). The parameters recorded were germination percentage, number of days required for germination, number of embryos per seed (polyembryony), plant height, stem diameter, number of leaves and length and diameter of roots.

The results revealed that higher values of germination percentage, number of embryos (polyembryony), number of leaves and root diameter and fewer days for germination were shown by decorticated seeds than undecorticated (intact) ones, regardless of the stage of fruit development. Seeds obtained from green, mature fruits, whether decorticated or undecorticated, took more days to germinate than those from ripe or over ripe fruits. Generally, higher values of plant height, stem diameter, number of leaves and root length and diameter were given by decorticated seeds than undecorticated ones, regardless of the stage of fruit development. The lowest values of all parameters were shown by seeds obtained from green, mature fruits regardless of decortication.