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Study of Dormancy-Breaking of Bitter Apple Seed (Citrullus Colocynthis L. Schard)

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Abstract : This study aimed to examine dormancy-breaking of bitter apple (Citrullus colocynthis) seed. Seeds of wild bitter apple collected from the Balochestan zone in east of Iran were subjected to different treatments including temperatures (20 and 30°C) and some dormancy breaking methods on breaking seed dormancy of bitter apple. Only 6 treatments from 12 dormancy breaking treatments were effective in dormancy breaking, therefore only effective treatments were analyzed. In general, germination percentage of cleaved seeds, soaked seeds in hot water (98°c) and soaking in H2SO4 in both temperatures was higher than other treatments and germination percentage of soaked seeds with sandy paper in both temperature was lower than other treatments. Also germination percentage of soaked seeds in hot water (98°c) and naturally cracked seeds in temperature 20°c was higher than 30°c.

Keywords: foliar application, nano chelate, nitrogen, Safflower

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