

# Improvement of rooting in *Forsythia intermedia* cuttings by plant growth regulators (PGRs)

SOMAYEH GHOLAMI\*,

**Abstract** Yellow Jasminum (*Forsythia intermedia*) belongs to Oleaceae family, one of the well-known species of this family. The plant is reproduced by cuttings and cuttings root require special treatments such as auxin and appropriate medium. Therefore, this study had been carried out in a factorial experiment based on randomized complete block design with two factors of plant growth regulators IBA in 4 levels (0, 500, 1000 and 1500ppm) and NAA in 4 levels (0, 500, 1000 and 1500ppm) in 16 treatments, 3 replicates with 48 plots, each plot 10 cuttings. In this study, some traits such as rooting percentage, root number, root length, root fresh weight, root dry weight, root volume and root diameter can be evaluated. The results showed that the effect of different concentrations of IBM and NAA on the measured traits were significant at 1% and 5%. Interaction effect between treatments was significant for all traits, so that the highest rooting percentage was related to 1,000 ppm IBA 1500 ppm NAA (0.51). The highest number of roots is related to 1,500 ppm IBA 1500 ppm NAA.

**Keywords :** *intermedia*, Rooting percentage, IBA, NAA.

[Islamic Azad University, Rasht Branch - Thesis Database](#)  
[دانشگاه آزاد اسلامی، واحد رشت - سامانه بانک اطلاعات پایان نامه ها](#)