

Study of Main Factors Influencing Olive Propagation

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Abstract: From 2009-2011, several experiments were carried out at the propagation Station in Tirana having as objective the study of the influence of endogenous and exogenous factors on two olive cultivars, “White olive of Tirana”, (BT) and “The black of Tirana” (ZT). The green cuttings are treated by different concentration of IBA at several stages of their meristem tic activity. Induced rhizogenesis after callus tissue formation was influenced significantly (lsd.2.11 HSD, $q=0.05$) by the presence of inflorescence (13.3%). The apical green cuttings differed from medial part and basal ends respectively 8.8% and 13.3%. In May, the IBA concentrations 3 g/l^{-1} has improved significantly rooting at studied cultivars, 20.2% (BT) and 9.4 % (ZT). While in October and February period, the treatment by IBA at concentration of 5 g/l^{-1} improved the rooting capacity by 11.7% (BT) and 7.7 % (ZT) compared to the results achieved by using the concentration 3 g/l^{-1} of IBA. The cultivar affects and presents a strong relation with the IBA concentration ($r = 0,689$), and with the period ($r = 0,888$). Defoliation percentage is specially related to the period ($r = 0.557$) and the other techniques applied. The factors grouping highly influenced rooting percentage of olive cultivars, by a regression coefficient of $R^2= 0.7084$.

Key words: *Cultivar, stimulation, rooting capacity, Olea europea, autochthonous.*

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