

INFLUENCE OF LEAF AREA ON THE ROOTING PERCENTAGE OF KIWIFRUIT CUTTINGS, PRE-TREATED WITH IBA 3000 PPM

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Abstract

Kiwifruit (*Actinidia deliciosa* C. F. Liang & A. R. Ferguson) is very interesting and a very important fruit tree in the world's horticultural history. While the area under cultivation and kiwifruit production in the world is increasing year by year (over 2 million tons), a big issue is the seedling production. Kiwifruit can be propagated with seeds, vegetative cuttings, and micropropagation. The paper presents the influence of leaf area on rooting of greenwood and semi-hardwood cuttings of kiwifruit. The study was conducted during two consecutive years, 2012-2013, in a private greenhouse in Lezha, using two periods of taking cuttings: July 5, with greenwood cuttings, and September 5, with semi-hardwood cuttings. A randomised complete block design (RCBD) with two variants (full leaf cuttings and half leaf cuttings) and three replications, with a plot size of 100 vegetative cuttings for variant for each replication, was used. Vegetative cuttings were pre-treated with indol-3-butyric acid (IBA) 3000 ppm and were planted on a perlite-peat mix (60:40) supporter, under controlled environmental conditions (air temperature 22-26°C, basal perlite-peat mix temperature 17-18°C, and 90-95% RH). In July, the experimental greenhouse was shaded with a black mesh. Obtained results showed that greenwood and semi-hardwood cuttings with ½ of leaf area rooted better than cuttings with full leaf area, in both planting periods. The highest rooting percentage was achieved using greenwood cuttings with ½ leaf area, planted in July 5th, and semi-hardwood cuttings with ½ leaf area, planted in September 5th, by 68% and 64%, and 56% and 52%, respectively. Differences between variants were testified using LSD and statistical ANOVA-tests.

Keywords: *greenwood cuttings, kiwifruit, leaf area, rooting percentage, semi-hardwood cuttings*