Effect of Plug Production on the Growth of Rhubarb (Rheum rhabarbarum) by Open Field

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Plug seedling technology is needed to produce a uniform young seedling of rhubarb (Rheum rhabarbarum) when plug production is used. When plug production is used, the size of the plug and the length of seedlings were examined. Production rhubarb, the larger the plug size, the larger the tomb and the more leaves. Seedlings during 40 days which was seeded in 162 plug tray was effective in seedling quality and mat formation. Based on 40 days of seedling period, the plug standard was the best at 162 plug, rhubarb root formation was superior to 128 plug, and 162 plug. The purpose of this test is to determine the plug size and seedling length suitable for Rhubarb seedlings. For the plug size test, four kinds of 128, 162, 200, and 288 plugs were tested. The seedlings were 30 days, 40 days, 50 days and 60 days. Rhubarb varieties were "Victory". The test site was tested at Taebaek city (750 m above sea level) in Gangwon province, south of Korea. Plug seedlings are needed to produce uniform seedlings of rhubarb. Planting seeds without seeding them directly reduces the labor force, increases yields, and saves seeds. Therefore, Rhubarb should be cultivated considering the size and shape of the seeds. Cultivation of seedlings using a plug is widely used in many crops. The formation of rhubarb underground mat was better with larger plug size. Especially, the height of the seedlings was 16.0 cm and the number of leaves was 5. Plant root weight was also 1.3 g, which was heavier than other treatments. The mat formation of the underground was best when it was cultivated for 40 days. The larger the plug size, the bigger and bigger the seedlings were. When the seedling period was less than 30 days or more than 50 days, the growth was immature or aged and the growth was disadvantageous. Test results showed that Rhubarb seeding period was best for 40 days. And 162 plug was the most suitable plug specification for seedling.

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