

News



The Growth of Apios (Apios americana Medikus), a New Crop, under Field Conditions

Kiyochika HOSHIKAWA and Juliarni

Faculty of Agriculture, Tohoku University
Faculty of Agriculture, Tohoku University
[Published: 1995/06/05]
[Released: 2008/02/14]

Abstract:

To investigate the growth of apios (Apios americana Medikus) under field conditions, the sequential increase in the dry weights of shoot and underground part from April to November 1993 was monitored. Seed tubers weighing 3-4 g (fresh weight) were planted in a Tohoku University experimental field. The emergence of buds on the ground occurred 30 days after planting (DAP). Dry weights of vine and leaf increased progressively 98 days after planting, reached a maximum by 168 DAP, and then declined for the remainder of the growing season. The initiation of new tubers along the rhizomes took place by 68 DAP, but progressive enlargement occurred after maximum shoot growth or after the peak of flowering. The growth of new tubers might have stopped as the plant wilted by 217 DAP. Seed tuber (mother tuber) of apios did not degenerate. Its dry weight gradually decreased until maximum shoot growth, and then increased when tuber growth became predominant. The weight of the seed tuber at the end of the growth was similar to that at planting. It was suggested that these results could be used as a basis of knowledge on apios growth which would be of use in its cultivation. Keywords:

Apios, Apios americana Medikus, Field conditions, Growth, Rhizome, Seed tuber, Shoot, Under-ground part

[Full-text PDF (572K)]

Copyright© Crop Science Society of Japan

Access Policy

Privacy Policy Link Policy

Policy Contact

Amendment Policy

Japan Science and Technology Agency

