containing 0.2 mg liter⁻¹ kinetin. The Hyponex medium without growth regulators was not as effective in inducing roots on shoots, with 2.3 roots on average formed. The numbers of roots were: *H. truncata*, 4.1±2.0; *H. emelyae*, 3.3±2.1; *H. turgida*, 1.3±0.9; and *H. arachnoidea*, 0.8±1.0. The regeneration rate of plantlets from callus was similar to the rate of root formation from shoots. The difficulty of regenerating plantlets from callus still remains.

Induction of Axillary Buds by Nodal Segment Culture and Rooting of Axillary Shoots of *Epipremnum aureum*

T. Yamamoto, Y. Ito, F. Uchida, and I. Mitsuishi

Department of Horticulture, University of Minami-Kyushu, Hibarigaoka, Takanabe-cho, Miyazaki Prefecture. 884

Nodal segments (5 mm in length) were excised from the shoots of potted *Epipremnum aureum* Bunt. which had been obtained from a market. After sterilization with 1% sodium hypochlorite solution, nodal segments were placed on Murashige and Skoog (MS) media with differing concentrations of benzyladenine (BA 0, 5, 10, and 15 mg liter⁻¹). The highest value of axillary bud induction (%) was observed in the MS medium supplemented with 10 mg liter⁻¹ BA. When young nodes were used as explants, a number of adventitious shoots were formed on the explants. In this case, two types of shoots were observed, one with spotted leaves similar to the donor plant and another with unspotted green leaves.

It was found in both the media supplemented with 10 mg liter^{-1} BA or 10 mg liter^{-1} kinetin that the axillary bud break (%) of the plants derived from micropropagation was higher than that of the plants grown from soft cuttings.

When the axillary shoots reached about 2 cm in length, the shoots were excised from the explants and transferred to a vermiculite medium in vivo. As shown in Table 1, the rooting (%) of the shoots induced on the medium with 10 mg liter kinetin was higher than those on the media with 10 mg liter BA and control. Benzyladenine in the shoot-induction medium suppressed the rooting in the vermiculite medium. The shoot induction medium with 10 mg liter kinetin had a promotive effect on the number of roots and on the maximum root length. Using this method the period necessary for obtaining good transplants was shortened, and the regenerated plants are now growing normally in a greenhouse.

Table 1. Rooting of axillary shoots in a vermiculite medium.

Hormones in axillary bud induction medium	Rooting (%)			Nihow of	Length of
	5	10	20*	Number of roots**	maximum root (cm)
Free	20	30	75	1.7±0.2	3.0±1.0
Kinetin (10 mg liter ⁻¹)	50	83	83	$2.6 {\pm} 0.3$	$7.7 {\pm} 2.6$
BA (10 mg liter ⁻¹)	5	10	70	1.8 ± 0.3	3.6 ± 0.7

^{*} Days after transplantation

^{**} Values 25 days after transplantation