A PRELIMINARY REPORT ON THE TISSUE CULTURE OF *ACALYPHA WILKESIANA*

by

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Acalypha wilkesiana (syn. *A. tricolor*) is a shrub which has many varieties and hybrids. One hybrid which has variegated leaves of yellow and green colour is cultivated commonly as a roadside shrub all over the island. Propagation of this shrub is by stem cuttings.

Following the successful production of plantlets from tissue culture of stem internode callus of *Paulownia taiwaniana* (Fu, 1978) which is a woody species grown commercially for its timber a study was carried out to propagate this *A. wilkesiana* hybrid through tissue culture.

Stem cuttings of *A. wilkesiana* hybrid were collected. Internodal sections were cut and sterilised in chlorox solution. These internodal sections were then cultured asceptically in medium with 2, 4-dicholorophenoxyacetic acid (Table I). After 3 months callus formation was observed. These callus sections turned green and were eventually transferred to medium D (Table II) for further development. In medium D the callus differentiated and produced leafy shoots (Plate 1) in 6 months.

Further investigations are now being carried out on the issue culture of *A. wilkesiana* hybrid the results of which will be published subsequently.

TABLE I

MEDIUM FOR INDUCING CALLUS

	per litre
Murashige & Skoog inorganic salts	full strength
White organic compounds	half strength
Myoinositol	100 mg
Coconut water	150 ml
2, 4 dichlorophenoxyacetic acid	3 mg
Sugar	30 g
Agar	9 g
pH	5.2

TABLE II

MEDIUM D FOR INDUCING LIVING SHOOTS

	per litre
Murashige & Skoog inorganic salts	full strength
Thiamine	0.4 mg
Myoinositol	100 mg
Sugar	30 g
Indoleacetic acid	0.5 mg
Kinetin	0.5 mg
Agar	9 g
pH	5.2

LITERATURE CITED

Fu, M.L. (1978). Plantlets from *Paulownia* tissue culture. Gard. Bull. Sing. 31(1): 61-66.

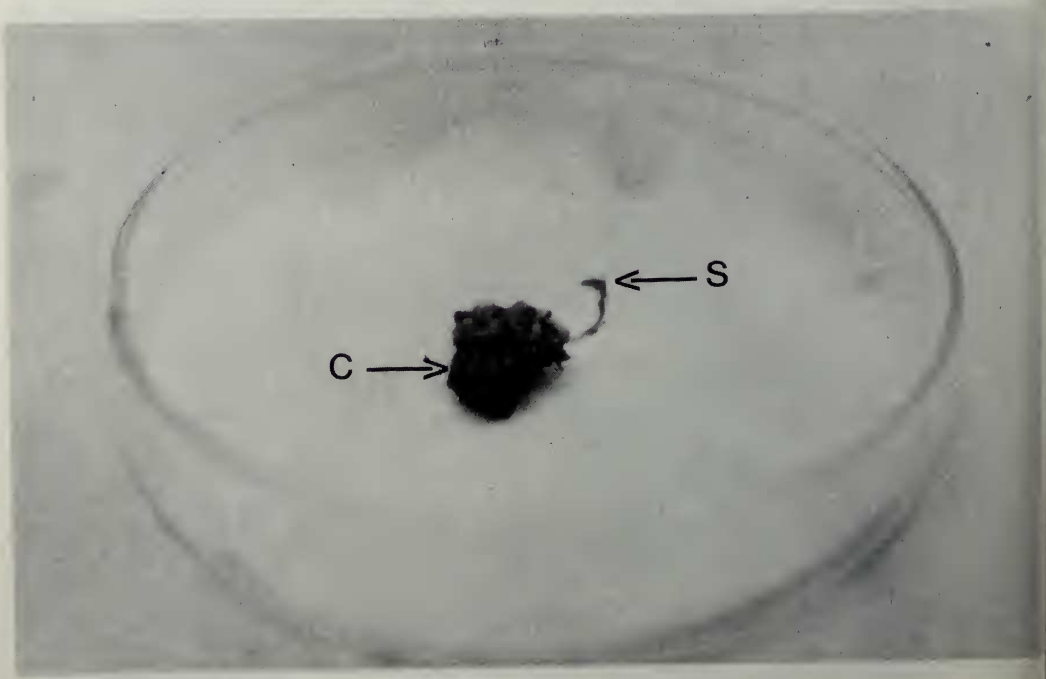

PLATE 1

Internodal section of *A. wilkesiana* with callus (c) and a shoot (s).