

**THE INFLUENCE OF ENVIRONMENT, MEDIA, AND ZEROTOL ON FORCING AND *IN VITRO*
ESTABLISHMENT OF SOFTWOOD SHOOTS FROM LARGE STEM SEGMENTS OF *ACER*
SACCHARINUM L. AND *FRAXINUS PENNSYLVANICA* MARSH**

Faheem Aftab^{1,2}, Katayoun Mansouri¹ and John E. Preece^{1,*}

¹Department of Plant, Soil and Agricultural Systems, Southern Illinois University,
Carbondale, IL 62901-4415, USA, *Tel: +618-453-1796, *Fax: +618-453-7457, *E-mail: jpreece@siu.edu
² Current Address: Department of Botany, University of the Punjab, Q. A. Campus, Lahore-54590, Pakistan

REFERENCES

- Cameron A. D., Sani H. (1994). Growth and branching habit of rooted cuttings collected from epicormic shoots of *Betula pendula* Roth. *Tree Physiology*, 14: 427-436.
- Driver J. A., Kuniyuki A. H. (1984). *In vitro* micropropagation of paradox walnut rootstock. *HortScience*, 19: 507-509.
- Henry P. H., Preece J. E. (1997a). Production and rooting of shoots generated from dormant stem sections of *Acer* species. *HortScience*, 32: 1274-1275.
- Henry P. H., Preece J. E. (1997b). Production of shoots from dormant *Acer* as influenced by length and caliper of stem sections. *Journal of Environmental Horticulture*, 15: 153-156.
- Kim M.-S., Schumann C. M., Klopfenstein N. B. (1997). Effects of thidiazuron and benzyladenine on axillary shoot proliferation of three green ash (*Fraxinus pennsylvanica* Marsh.) clones. *Plant Cell, Tissue and Organ Culture*, 48: 45-52.
- Kling G. J., Meyer Jr. M. M. (1983). Effects of phenolic compounds and indoleacetic acid on adventitious root initiation in cuttings of *Phaseolus aureus*, *Acer saccharinum*, and *Acer griseum*. *HortScience*, 18: 352-354.
- Larson H. C. (1968). Some methods of selecting and propagating asexually high quality phenotypes of silver maple (*Acer saccharinum* L.). *Proceedings of the 15th Northeastern Forest Tree Improvement Conference*: 75-86.
- Murashige T., Skoog F. (1962). A revised medium for rapid growth and bioassays with tobacco tissue cultures. *Physiologia Plantarum*, 15: 473-497.
- Preece J. E. (2003). A century of progress with vegetative plant propagation. *HortScience*, 38: 1015-1025.
- Preece J. E., Huetteman C. A., Ashby W. C., Roth P. L. (1991a). Micro- and cutting propagation of silver maple. I. Results with adult and juvenile propagules. *Journal of the American Society for Horticultural Science*, 116: 142-148.
- Preece J. E., Huetteman C. A., Ashby W. C., Roth P. L. (1991b). Micro- and cutting propagation of silver maple. II. Genotype and provenance affect performance. *Journal of the American Society for Horticultural Science*, 116: 149-155.
- Preece J. E., Huetteman C. A., Puello C. H., Neuman M. C. (1987). The influence of thidiazuron on *in vitro* culture of woody plants. *HortScience*, 22: 1071 (Abst).
- Preece J. E., Read P. E. (2003). Novel methods in micropropagation. *Proceedings of the 1st international symposium on acclimatization and establishment of micropropagated plants. Acta Horticulturae*, 616: 71-76.
- Van Sambeek J. W., Lambus L. J., Khan S. B., Preece J. E. (1999). Production of epicormic sprouts on branch segments of adult black walnut for *in vitro* culture. 88th Annual Report Northern Nut Growers Association: 93-104.
- Van Sambeek J. W., Lambus L. J., Preece J. E. (1997). Production of epicormic sprouts on branch segments of adult black walnut for *in vitro* culture. 88th Annual Report Northern Nut Growers Association: 93-104.
- Van Sambeek, J. W., Preece J. E. (1999). Forcing environment affects epicormic sprout production from branch segments for vegetative propagation of adult hardwoods. *Combined Proceeding International Plant Propagators Society*, 49: 156-158.
- Van Sambeek J. W., Preece J. E., Goggeshall M. V. (2002). Forcing epicormic sprouts on branch segments of adult hardwoods for softwood cuttings. *Combined Proceedings of International Plant Propagators Society*, 52: 417-424.