

## APPENDIX 3: PUBLICATIONS AND RESEARCH ACTIVITIES

**A list of publications for research activities carried out on, or immediately adjacent to, the series of 20 CSIRO permanent plots\***

### Scientific Publications Containing Plot Data

Beadle, N. C. W. (1981) *The vegetation of Australia*. Cambridge University Press, Cambridge.

(all plots except 18, 19 and 20)

Stocker, G. C. (1983) *Aspects of the dynamics of rainforests in north east Australia*. PhD Thesis, University of New England.

(all plots except 20; copy held at CSIRO Atherton)

Stocker, G. C. (1988) *Tree species diversity in rainforests – establishment and maintenance*. *Proceedings of the Ecological Society of Australia* 15: 39-47.

(all plots except 20)

Stocker, G. C. and Unwin, G. L. (1989) *The rain forests of northeastern Australia – their environment, evolutionary history and dynamics*. In: *Tropical Rain Forest Ecosystems, Biogeographical and Ecological Studies*. (Eds. H. Lieth and M. J. A. Werger) Elsevier, Amsterdam. pp. 241-259.

(all plots except 20)

Stocker, G. C., Thompson, W. A., Irvine, A. K., Fitzsimon, J. D. and Thomas, P. R. (1995) *Annual patterns of litterfall in a lowland and tableland rainforest in tropical Australia*. *Biotropica* 27(4): 412-420.

(plots 3 and 11)

Stocker, G. C., Unwin G. L. and West, P. W. (1985) *Measures of richness, evenness and diversity in tropical rainforest*. *Australian Journal of Botany* 33: 131-137.

(all plots except 20)

Unwin, G. L., Applegate, G. B., Stocker, G. C. and Nicholson, D. I. (1988) *Initial effects of Tropical Cyclone 'Winifred' on forests in north Queensland*. *Proceedings of the Ecological Society of Australia* 15: 283-296.

(plots 9 and 12)

West, P. W., Stocker, G. C. and Unwin, G. L. (1988) *Environmental relationships and floristic and structural change in some unlogged tropical rainforest plots of north Queensland*. *Proceedings of the Ecological Society of Australia* 15: 49-60.

(all plots except 20)

## Other Ecological Publications For Research Sites Within Or Adjacent To Plot Areas\*

Armstrong, J. E. and Irvine, A. K. (1989) Floral Biology of *Myristica insipida* (Myristicaceae). A distinctive beetle pollination syndrome. *American Journal of Botany* 76(1): 86-94.  
(plots 3 and 11)

Armstrong, J. E. and Irvine, A. K. (1989) Flower, sex ratios, pollen-ovule ratios, fruit set and reproductive effort of a dioecious tree. *Myristica insipida* (Myristicaceae) in two different rainforest communities. *American Journal of Botany* 76(1): 74-85.  
(plots 3 and 11)

Armstrong, J. E. and Irvine, A. K. (1990) Functions of Staminodia in a beetle-pollinated flower of *Eupomatia laurina*. *Biotropica* 22(4): 429-431.  
(plots 3 and 11)

Doley, D., Unwin G. L. and Yates D. J. (1988) Spatial and temporal distribution of photosynthesis and transpiration by single leaves in a rainforest tree. *Argyrodendron peralatum*. *Australian Journal of Plant Physiology* 15(1,2): 317-326.  
(plot 11)

Doley, D., Yates D. J. and Unwin G. L. (1987) Photosynthesis in an Australian rainforest tree, *Argyrodendron peralatum* during the rapid development and relief of water deficits in the dry season. *Oecologia* 74: 441-449.  
(plot 11)

Grubb, P. J., Metcalfe, D. J., Grubb, E. A. A. and Jones, G. D. (1998) Nitrogen-richness and protection of seeds in Australian tropical rainforest: a test of plant defence theory. *Oikos* 82: 467-482.  
(plots 4, 5, 11, 12 and 15)

Herwitz, S. R. (1982) Tropical rainforest influences on rainwater flux. PhD Thesis, Australian National University.  
(plot 11)

Herwitz, S. R., Slye, R. E. and Turton, S. M. (1998) Co-registered aerial stereopairs from low-flying aircraft for the analysis of long-term tropical rainforest canopy dynamics. *Photogrammetric Engineering and Remote Sensing* 64(5): 387-406.  
(plot 11)

Herwitz, S. R., Slye, R. E. and Turton, S. M. (2000) Long-term survivorship and crown area dynamics of tropical rain forest canopy trees. *Ecology* 81(2): 585-597.  
(plot 11)

Hopkins, M. S., Tracey, J. G. and Graham, A. W. (1990) The size and composition of soil seed banks in remnant patches of three structural rainforest types in North Queensland. *Australian Journal of Ecology* 15: 43-50.  
(plot 11)

House, S. M. (1989) Pollen movement to flowering canopies of pistillate individuals of three rainforest tree species in tropical Australia. *Australian Journal of Ecology* 14: 77-94.

House, S. M. (1992) Population density and fruit set in three dioecious tree species in Australian tropical rainforest. *Journal of Ecology* 80: 57-69.

House, S. M. (1993) Pollination success in a population of dioecious rainforest trees. *Oecologia* 96(4): 555-561.

Irvine, A. K. and Armstrong, J. E. (1988) Beetle pollination in Australian tropical rainforests. *Proceedings of the Ecological Society of Australia* 15: 107-113.

(plots 3 and 11)

Irvine, A. K. and Armstrong, J. E. (1989) *Beetle pollination and comparisons in some tropical forests of Australia and America*. In: Reproductive Ecology of Tropical Forest Plants (Eds. K. S. Bawa and M. Hadley). Man and the Biosphere, UNESCO.

(plots 3 and 11)

Kershaw, A. P. and Strickland, K. M. (1990) A 10 year pollen trapping record from rainforest in northeastern Queensland, Australia. *Review of Palaeobotany and Palynology* 64: 281-288.

(plot 5)

Lewis, S. L., Phillips, O. L., Sheil, D., Vinceti, B., Baker, T. R., Brown, S., Graham, A. W., Higuchi, N., Hilbert, D. W., Laurance, W. F., Lejoly, J., Malhi, Y., Monteagudo, A., Vargas, P. N., Sonké, B., Nur Supardi M. N., Terborgh, J. W., Martínez, R. V. (2004) Tropical forest tree mortality, recruitment and turnover rates: calculation, interpretation and comparison when census intervals vary. *Journal of Ecology* 92: 929-944

(plots 2 and 5)

Myers, B. J. (1981) Guide to identification of some tropical rainforest species from large – scale aerial photographs. *Australian Forestry* 45(1): 28-41.

(plots 1, 2, 3, 5, 9 and 11)

Myers, B. J. and Benson M. L. (1981) Rainforest Species on large – scale colour photos. *Photogrammetric Engineering and Remote Sensing* 47(4): 503-513.

(plots 1, 2, 3, 5, 9 and 11)

Myers, B. J., Robichaux, R. H., Unwin, G. L. and Craig, L. E. (1987) Leaf water relations and anatomy of a tropical rainforest tree species vary with crown position. *Ecology* 74: 81-85.

(plot 11)

Osunkoya, O. O., Ash, J. E., Hopkins, M. S. & Graham, A. W. (1992) Factors affecting survival of tree seedlings in North Queensland rainforests. *Oecologia* 91: 569-578.

(plot 11)

Osunkoya, O. O., Ash, J. E., Hopkins, M. S. and Graham, A. W. (1993) Growth of tree seedlings in tropical rainforests of North Queensland. *Journal of Tropical Ecology* 9: 1-18.  
(plot 11)

Osunkoya, O. O., Ash, J. E., Hopkins, M. S. and Graham, A. W. (1994) Influence of seed size and seedling ecological attributes on shade tolerance of North Queensland rainforest tree species. *Journal of Ecology* 82: 149-163.  
(plot 11)

Pfeifer, M. (2002) Spatial distribution pattern of pioneer and non-pioneer tree species in a dry tropical rainforest of Northern Queensland. MSc Thesis, Friedrich Schiller University of Jena, Jena, Germany.  
(Plot 11)

Stocker, G. C. and Irvine, A. K. (1983) Seed dispersal by Cassowaries (*Casuaris casuaris*) in Queensland rainforests. *Biotropica* 15(3): 170-176.  
(plots 3 and 9)

Unwin, G. L. (1983) Dynamics of the rainforest – eucalypt forest boundary in the Herberton Highland, North Queensland. MSc Thesis, James Cook University, Townsville.  
(plots 15 and 19 with CSIRO sclerophyll forest plots EP36 and EP39)

Unwin, G. L. (1989) Structure and composition of the abrupt rainforest boundary in the Herberton Highland. *Australian Journal of Botany* 37(5): 413-442.  
(plots 15 and 19 with CSIRO sclerophyll forest plots EP36 and EP39)

Unwin, G. L. and Kriedmann, P. (1990) Drought tolerance and rainforest tree growth on a North Queensland rainfall gradient. *Forest Ecology and Management* 30: 113-123.  
(plots 3 and 11)

Unwin, G. L. and Sanderson, K. D. (1983) *The use of experimental fire to study the effects on the rainforest-eucalypt forest boundary, Herberton Highland*. In: North Queensland. Fire Research Workshop, Gympie (Ed. B. R. Roberts) Darling Downs Institute Advanced Education. pp. 95-109.  
(plot 15 and CSIRO sclerophyll forest plot EP39)

Yates, D. J., Unwin, G. L. and Doley, D. (1988) Rainforest environment and physiology. *Proceedings of the Ecological Society of Australia* 15: 31-37.  
(plot 11)

\* A number of rainforest ecophysiological studies were carried out from the now-demolished canopy towers adjacent to plots 3 and 11. This research addressed some of the species found on the adjacent plots and some relevant publications are listed above. Published details of other ecophysiological research may be obtained from the CSIRO Tropical Forest Research Centre library in the centre's list of publications.