

OFFICE DE LA RECHERCHE SCIENTIFIQUE ET TECHNIQUE OUTRE-MER
CENTRE D'ADIOPODOUME
B.P. V51 ABIDJAN (Côte d'Ivoire)

Laboratoire de Phytopathologie

CONTRIBUTION DU LABORATOIRE DE PHYTOPATHOLOGIE

AU

6ème CONGRES INTERNATIONAL DE L'IUFRO - S₂-06.01

(International Union of Forest Research Organisation)
Melbourne, Australie, 25 au 31 août 1983

"CHAMPIGNONS PARASITES DES RACINES ET DES BOIS D'OEUVRE"

Textes et Résumés des Communications et Posters.

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PROGRAMME

WEDNESDAY 24th August

12:00 p.m. - 4:00 p.m. Registration, Foyer of old Agriculture and Forestry Building, Melbourne University.

THURSDAY 25th August

Kimpton Lecture Theatre, Agriculture and Forestry Building

8:50 a.m. - 9:30 a.m. Conference Opening by Dr. J.J. Landsberg, Chief CSIRO Division of Forest Research

9:30 a.m. - 12:30 p.m. Genetics and Taxonomy.
Chairman: G.A. Kile

9:30 Morrison, D.J. and Chu, D. Characterization of *Armillaria* intersterility groups by isozyme patterns.

10:00 Tea

10:30 Bolland, L. Polypoidy in *Phellinus noxius*.

11:00 Peabody, D.C. and Peabody, R.B. Photometric nuclear cycle analyses of the basidiomycetous pathogen *Armillaria mellea*.

11:30 Guillaumin, J.J., Lung, B., Romagnesi, H., Marxmuller, H., Lamoure, D., Berthelay S., Savin, V. Taxonomy and biological cycles of the French *Armillaria* species.

12:00 Hutterman, A., Feig, R., and Merg, G. Biochemical capabilities and regulation as a basis for species differentiation and ecological behaviour of *Armillaria* species.

1:30 p.m. - 5:00 p.m. Infection and Spread
Chairman: D.B. Redfern.

1:30 Siepman, R. Pathogenicity tests with *Calocera viscosa*.

2:00 Hansen, E.M., Reynolds, K., Angwin, P. Factors influencing spread of *Phellinus weirii*.

2:30 Barrett, D.K. and Greig, B.J.W. Investigations into the infection biology of *Phaeolus schweinitzii*.

3:00 Tea

3:30 Redfern, D.B. Factors influencing spread of *Heterobasidion annosum* in plantations.

4:00 Wargo, P. How stress predisposes trees to attack by *Armillaria mellea* - a hypothesis.

4:30 Whitney, R.D. Site variations of *Armillaria* root rot in three Ontario conifers.

FRIDAY 26th August

8:15 a.m. Field trip to Mount Cole Forest; Colonial Dinner, Creswick.

(Assembly point outside Agriculture and Forestry Building, Royal Parade, Parkville).

MONDAY 29th August

Lecture Theatre, Queensland Forestry Training Centre

9:00 a.m. - 12:30 p.m. Pathogenicity and Pathogenicity Testing.
Chairman: G.C. Shaw III.

9:00 Rishbeth, J. Pathogenicity tests for *Armillaria*.

9:30 Newhook, F. and Benjamin, M. The relative susceptibility of various *Eucalyptus* spp. and *Pinus radiata* to *Armillaria* grown in different food bases.

10:00 Gregory, S. The use of potato tubers in pathogenicity studies of *Armillaria* species.

10:30 Tea.

11:00 Shaw, G.C. *In vitro* responses to gallic acid fail to separate between pathogenic and non-pathogenic species of *Armillaria*.

11:30 Nicole, M. ^{NANDRIG, D & GEIGER, J.P.} Pathotypes of *Rigidoporous lignosus* and *Phellinus noxius* isolated from different hosts in West Africa.

1:30 p.m. - 3:30 p.m. Factors Affecting Host Resistance - Interactions of Host Chemistry and Fungal Physiology
Chairman: M. Hubbes (for P.M. Wargo).

1:30 Wargo, P.M. Changes in phenols effected by *Armillaria mellea* in bark of roots of oak.

2:00 Haars, A., Cweilong, P., Huttermann, A. Effect of phenolic and other aromatic substances on growth, morphology and certain enzyme activities of *Fomes annosus*.

2:30 Hubbes, M., Falusi, K., Dumas, M. The role of phenols in the chemical resistance of pines to *Heterobasidion annosum*.

3:00 Johannsen, M. and Stenlid, J. Biochemical interactions between *Fomes annosus* and living wood of spruce roots during the initial stage of infection.

3:30 Tea.

4:00 p.m. - 5:00 p.m. Poster Session I
Common Room, Queensland Forestry Training Centre.

Shaw, C.G. and Florance, E. Spore wall structure in *Armillaria*

Benjamin, M. and Newhook, F.J. *Armillaria* clones in pine plantations in central North Island, New Zealand.

Nelson, E. Pathogenicity of *Phellinus weirii*.

Geiger, J.P., Nandris, D., Nicole, M., Huguenin, B. Comparative studies of rubber root rot caused by *Rigidoporous lignosus* and *Phellinus noxius* in Ivory Coast : Physiological, biochemical and cytological aspects of host parasite interactions.

7:00 p.m. - 9:00 p.m. Pathogen Physiology - Biochemical Control?
Chairman: A. Huttermann.

7:00 Dimitri, L. Control of *Fomes annosus* inside the tree with slow release formulations of fungicidal substances.

7:30 Chet, I. Biochemical manipulation of phytopathogenic fungi - the threonine effect.

8:00 Huttermann, A., Trojanowski, J., Haars, A., Bottcher, U. Physiology and mechanisms of lignin degradation by *Heterobasidion annosum*.

8:30 Stenlid, J., Johannsen, M. Inoculation of excused living spruce roots with conidial suspensions of *Heterobasidion annosum*.

TUESDAY 30th August

9:00 a.m. - 11:00 p.m. Root Rots in Sub-Tropical and Tropical Forests.
Chairman: L. Bolland.

9:00 Greig, B.J.W. *Fomes annosus* in the pine plantations of Jamaica.

9:30 Ofong, A.U. Epidemiological considerations and the control of *Fomes lignosus* (Klotzsch) Bres.

10:00 Nandris, D., Nicole, M., Geiger, J.P. Mallet, B. Root rot diseases in Ivory Coast's forests and plantations.

10:30 Varghese, G. and Chew, P.S. Pathological significance and problems of control of *Ganoderma* spp. parasitic to plantation crops in Malaysia.

12:00 p.m. - 5:00 p.m. Field trip in Gympie area.

WEDNESDAY 31st August

8:30 a.m. - 11:00 a.m. Wounding - Consequences and Control.
Chairman: L. Dimitri.

8:30 Shigo, A.L. Problems from living tree to wood product.

9:00 Kallio, T. Significance of wound decays in coniferous stands - possibilities of prevention and control.

9:30 Negrutsky, F. Wound inhabiting fungi - inhibitors of *Fomes annosus* and their use for biological control.

10:00 Tea.

10:30 Dimitri, L. Preliminary results of chemical application techniques to prevent wound decay.

11:00 Marks, G.C. and Long, I.R. Formation and compartmentalization of butt defect in *Eucalyptus regnans*.

11:00 a.m. - 12:30 p.m. Poster Session II

Pearce, G.D. Observations on a single occurrence of *Armillaria* root rot in Zambia.

Boisson, C., Declert, C., Geiger, J.P., Huguenin, B., Nandris, D., and Nicole, M. Rubber root rot : the O.R.S.T.O.M.'s approach.

Storozhenko, V.G. Kobetz, E.V., and Kulikov, A.I. The prediction of pine plantation resistance against root rot *Fomitopsis annosa* (Fr.) Karst.

Ladeischikova, E.I., Pasternak, C.M., Beliji, G.D. and Chernykl, A.G., Ladynykl, L.F. and Ustski, I.A.M. How do the ways of regulating stand density effect potential resistance of pine plantations to *Fomitopsis annosa* (Fr.) Karst.

1:30 p.m. - 5:00 p.m. Evaluation of Impact - Advances in Control
Chairman: D. Morrison.

1:30 Kato, F. Evaluation of wood and butt rot damage of Norway spruce (*Picea abies* Karst.).

2:00 Driver, C. Impact on wood product quality induced by *Heterobasidion annosum* infection in western hemlock.

2:30 Bloomberg, W.J. Surveying for root disease losses in British Columbia forests.
Wallis, G.W. and Lee, Y.J. Detection of *Phellinus weirii* using large scale 70mm aerial phtography.

3:00 Tea.

3:30 Siwicki, R. Selection for resistance to *Fomes annosus* in Scots pine.

4:00 Thies, W. and Russell, K. Controlling root rots in coniferous forests of northwestern North America.

4:30 van der Pas, J. The effect of site preparation on the incidence of *Armillaria* root rot in *Pinus radiata* four years after conversion of indigenous forest in Omataroa Forest, New Zealand.

5:00 p.m. - 5:30 p.m. Business Session.

6:30 p.m. for 7:00 p.m. Conference Dinner.

THURSDAY 1st September

8:30 a.m. Return to Brisbane - arrive Brisbane Airport
12:00 p.m. - 1:00 p.m.