

MYCOLOGICAL RECORDS

1: *DIPLODIA TAXI* (SOWERBY) DE NOTARIS

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ABSTRACT

Diplodia taxi (Sowerby) de Notaris occurring on *Taxus baccata* Linnaeus is reported as a new fungal record for New Zealand.

Keywords: *Diplodia taxi*; fungi; Coelomycete; *Taxus baccata*.

INTRODUCTION

A sample of *Taxus baccata* with yellowing and falling leaves was collected in a churchyard at New Plymouth and was received 1 day later at the New Zealand Forest Research Institute. No fungi were observed sporulating on the leaf surfaces and plating produced only the saprophytic species *Chaetomium* sp. and *Pestalotia* sp. However, the specimen was retained in its plastic bag and re-examined 17 days after receipt by which time all of the chlorotic leaves had developed fruiting bodies of *Diplodia taxi* (Fig. 1C). This fungus has not previously been recorded in New Zealand.

DESCRIPTION

Conidiomata pycnidial, ostiolate, flattened globose to broadly elliptical, immersed to suberumpent, very dark brown to black (Fig. 1C). **Ostiole** circular, non-papillate, later host cuticle splitting and peeling to give a slit or tri-stellate opening. **Conidiophores** simple, hyaline to pale greenish, arising from brownish cells of the pycnidial wall; conidiogenous cell producing terminal conidiospores, occasionally annulate (Fig. 1A). **Conidiospores** hyaline to very pale green, thick-walled, obovate, $13.6\text{--}17.4 \times 6.0\text{--}7.6 \mu\text{m}$, initially aseptate, but with maturation the beginnings of a subcentral septum often apparent (Fig. 1B).

Specimen examined: on *Taxus baccata* Linnaeus, St. Mary's Church, New Plymouth, 2.xii.1993, B.Rogan 0079 (cult No.3240), NZFRI(M) 3510

DISCUSSION

The initial hyaline coloration of the conidiospores was given as a generic characteristic of *Diplodia* by Sutton (1980) and as a specific characteristic of *D. taxi* by Ellis & Ellis (1985).

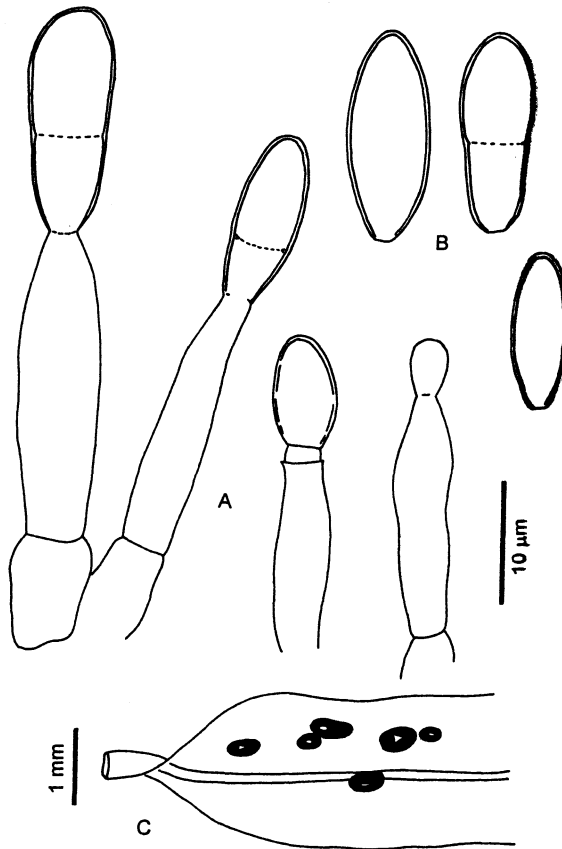


FIG. 1—A: conidiogenous cells and conidiophores; B: conidiospores; C: pycnidia.

The latter authors further noted that *D. taxi* conidiospores eventually become smoky brown. The development of pigment failed to occur in the New Plymouth sample and therefore the conidiospores were not morphologically mature. This may also account for their smaller size compared with the description of conidiospores as $20\text{--}25 \times 8\text{--}10 \mu\text{m}$ given by Ellis & Ellis.

Attempts at isolating from the fruit bodies yielded a very slow-growing mycelium. This slow development may account for the failure to detect it in the first isolation attempt. The only reference to pathogenicity of *D. taxi* was made by Greene (1946) when he noted that it "... occurred on languishing foliage of *Taxus* sp. in a nursery at Madison probably, but not certainly, saprophytic". At this stage it would appear that in New Zealand *D. taxi* is not of any major significance.

REFERENCES

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