Fungi on the move - the impact of plant pathogens moving into and out of natural ecosystems

Exotic plant pathogens that move into ecosystems that have evolved in the absence of that pathogen can have devastating impacts. In Australia, there have been multiple incursions of plant pathogens since European occupation in 1788, often with severe impacts on the diversity and viability of both flora and fauna. Less well documented is the potential for plant pathogens to move from native hosts to attack agricultural and horticultural plant species and impact on the productivity or aesthetics of those species.

I will discuss the impact of two exotic plant pathogens, one (*Phytophthora cinnamomi*) that has been present in Australia for over 200 years and the other (*Austropuccinia psidii* - myrtle rust) that has been there for 8 years, on native ecosystems. This will be contrasted with a number of *Fusarium* plant pathogens that have moved, or have the potential to move, from native ecosystems to evolve and attack grains, cotton and amenity plantings in a number of different ecosystems.