***Chondrostereum purpureum* as an inundative biological control agent for invasive woody weeds in New Zealand**

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Chondrostereum purpureum is a basidiomycete fungus that is being investigated as an inundative biological control agent for invasive woody weeds. This study was conducted to assess the susceptibility of seven species of weeds to *C. purpureum*. The species that were inoculated in this trial were: broom (*Cytisus scoparius*), gorse (*Ulex europeaus*), buddleia (*Buddleja davidii*), Himalayan honeysuckle (*Leycesteria formosa*), hawthorne (*Crataegus monogyna*), poplar (*Populus trichocarpa*) and willow (*Salix matsudana*). Two isolates of *C. purpureum* and a control were used and were each replicated 12 times. All plants were potted and the trial took place under nursery conditions. Mortality and canker size were measured 6 months after inoculation. Data were analysed using SAS. The highest mortality (50%) was recorded for broom with one isolate, but very little mortality was observed across the other species. A highly significant weed by isolate interaction was observed with regards to lesion length, with weed species susceptibility varying with respect to one of the *C. purpureum* isolates. Hawthorn and willow had greater lesion lengths after inoculation with the same isolate that had caused mortality in broom. The results from this trial are being used to direct a larger field trial.

Survival of weed seeds in cocopeat bricks for hydroponics

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In 2007 seeds of 31 species previously unknown in New Zealand were identified in cocopeat imported from Sri Lanka. Cocopeat is used as a growing medium for hydroponic vegetable production. The aim of this study was to evaluate the viability of weed seeds present in cocopeat over a 12 month growing season. Twenty or forty seeds of five representative species were counted into fine mesh bags and inserted into the cocopeat bricks. Tomatoes (*Lycopersicon esculentum*) and capsicums (*Capsicum annuum*) were grown in the cocopeat with nutrients supplied via a constant trickle of hydroponic nutrient solution. After 3 (n=4), 6 (n=4) and 12 (n=8) months seed packets were removed for germination testing, which was firstly carried out over 28 days on KNO₃-soaked blotters, after which ungerminated seed was pricked and left for a further 28 days. After 12 months 37% and 45% of the grass species *Panicum miliaceum* and *Digitaria sanguinalis* respectively germinated while that for the broadleaf species *Cleome rutidosperma*, *Mollugo nudicaulis* and *Amaranthus viridis* was 20%, 48% and 38% respectively. Results from the 3 and 6 month samplings were intermediate and show that long term exposure to hydroponic solution did little to reduce the viability of weed seeds found in imported cocopeat.