Latent Hypovirulence Phenomena in Endothia parasitica

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Hypovirulence has frequently been identified with white, poorly sporulating cultures grown on potato dextrose agar. Such cultures, when tested for virulence, are usually either low in virulence or avirulent. Colonies of this description can be obtained with high frequency (1 to 5 percent) when conidia of virulent Endothia parasitica isolates are irradiated with ultraviolet light. Such colonies may be the result of induction of the hypovirulent factor which has otherwise been latent within the fungal cell. Such white colonies, inducible at levels much greater than normal mutation rates, have been tested for doublestrand RNA (dsRNA) content and virulence. They are all low in virulence and contain no detectable dsRNA. Tests are currently being done to determine whether they are truly hypovirulent by testing their ability to convert virulent isolates to hypovirulent ones by cytoplasmic transfer.