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ADAPTATION TO ENVIRONMENT IN POWDERY MILDEW FUNGI

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Powdery mildew (PM) fungi are widely distributed throughout the world from the very arid areas to the very cold temperate regions. They are generally active during the dry periods of the year, whenever atmospheric humidity is high, and cause economic losses to crop plants as varied as wheat, rape, strawberry, mango and rubber (*Hevea*).

This paper discusses the biology of powdery mildews in general and examines in detail the environmental factors favouring two named PM pathogens, one affecting strawberry (*Sphaerotheca macularis*) in the temperate regions and the other *Hevea* (*Oidium heveae*) in the tropics. Temperature is obviously one of the key factors for adaptation; but there are other interesting factors such as overwintering, alternate hosts, reaction to free water and production of fruit bodies, which have not been considered in this context in the past. These are taken as examples to assess the mode of adaptation of different species of powdery mildews to life in their present environments.