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**Effect of relative humidity and temperature on the survival of *P. palmivora*,  
the causal organism of bud rot disease of coconut**

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A detailed survey on bud rot disease of coconut caused by *P. palmivora* carried out in Kasaragod, Kannur and Calicut districts of Kerala revealed that, there is an association between the disease incidence and the location of the palms. The proportions of the diseased palms were high in the hilly tracts (800-900 mse) when compared to that of the plains (150-300 mse). It was also noticed in the survey that the disease incidence in the hilly areas continued even after the monsoon, up to January. But in the plains the disease incidence was recorded only up to September. Studies on the survival of *P. palmivora* propagules in the nature revealed that the pathogen was found to survive in the crown debris of healthy and diseased palms. However the survival % was high in the endemic plots in diseased palms (80-95) and in healthy palms (24-42), compared to that of plots with less disease incidence. The moisture % in the crown debris of different places during April, July, October and January revealed that differences due to places, months and their interactions are highly significant. Epidemiological observations revealed that macro and micro humidity recorded was high from October – January compared to that of Kasaragod. This shows that the temperature and the humidity in the coconut growing tracts of hilly areas of Kasaragod, Kannur, Calicut districts are suitable for the survival of the pathogen in the crown during almost all months resulting in the high disease incidence during monsoon season and also responsible for the continued infection up to January. *In vitro* experiment also confirmed this. Studies on rainwater collected also indicated that the pathogen survives in the crown debris act as a source of inoculum which spread to the neighboring palms by rain splashes.