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SHORT COMMUNICATION

**PENICILLIUM PURPUROGENUM ON FRUITS OF AVERRHOA BILIMBI IN SRI LANKA.**

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**Key words:** *Averrhoa bilimbi*, *Penicillium purpurogenum*, red spot disease.

We report the isolation of *P. purpurogenum* from a Sri Lankan habitat and also its ability to cause red spots on fruits of *Averrhoa bilimbi*. Literature searches suggest that this is the first documented record of *P. purpurogenum* from Sri Lanka.

*P. purpurogenum* was isolated from infected fruits obtained from a *A. bilimbi* tree in Wijerama, Nugegoda. The infected areas of the fruits had dark red spots on their surfaces. The spots rapidly enlarged and the infected fruits decayed. Hence, the disease has the potential to cause an economic impact.

The fungus was isolated on potato dextrose agar [PDA], grown on both PDA and Czapek-dox agar [CDA] at 28°C and identified using the key given by Raper and Thom.<sup>1</sup> The identity was confirmed by the International Mycological Institute, London [IMI No. 357108, Dr.Z.Lawrence]. The fungal culture on both PDA and CDA were wrinkled, zonate, consisting of a orange-red mycelial mat bearing abundant conidial structures. The conidia were elliptical/sub-globose. The colonies consistently produced a deep red pigment into the culture medium.

The ability of *P. purpurogenum* to harm fruits of *A. bilimbi* were confirmed by following Koch's postulates. Ten µl droplets of a conidial suspension [ $1 \times 10^5$  conidia/ml] in sterile distilled water were placed, 1.5 cm apart from each other, on the surface of healthy fruits of *A. bilimbi*. The conidia were obtained from a 7-day old culture of the fungus on PDA. The inoculated fruits were incubated in a moist chamber at room temperature. Red spots developed on the inoculated areas of fruits 3-4 days after inoculation. The fungus was re-isolated from the inoculated, infected fruits and grown on both PDA and CDA. The characters of the re-isolated fungus

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was similar to the original isolate. The re-isolated fungus, when inoculated on to fruits of *A. bilimbi* using the method described earlier, also produced red spots on the surface of the fruits 3-4 days after inoculation. From these infected areas of the fruits *P. purpurogenum* was again re-isolated.

#### Reference

1. Raper K.B. & Thom C. (1949). A manual of the Penicillia. Williams and Wilkins, Baltimore. pp 122-125, 630-636.