JANSSEN PMP
PRESERVATION AND MATERIAL PROTECTION
a division of Janssen Pharmaceutica NV

JANSSEN PMP Research Bulletin and Label Update for deliveries to US

PENBOTEC™ labelled for the control of Bull's-Eye Rot on Pome Fruit

(*Neofabraea perennens* and *N. malicorticis*)

Control of Bull's Eye Rot disease on pome fruit has been added to the list of post-harvest disease claims for PENBOTEC™ 400 SC brand of pyrimethanil fungicide (EPA notification attached). The PENBOTEC 400 SC label will be updated at the next printing. Control of Bull's Eye Rot can be achieved by following directions for use on the current product label.

In a trial conducted by Dr. Peter Sholberg and Sarah Stokes, Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre, Summerland, British Columbia, the efficacy of PENBOTEC brand pyrimethanil post-harvest fungicide against the Bull's Eye Rot disease of apples caused by the fungi *Neofabraea perennens* and *N. malicorticis* is demonstrated.

Red Delicious apples were removed from air storage 3 weeks after harvest, five replicate samples of 10 apples per treatment were then wounded in triplicate, using an alcohol sterilized 3 mm diameter nail embedded in a cork so that wounds of uniform width and depth were made in each fruit. Wounded apples were then placed in mesh bags and dipped for two minutes in conidial spore suspensions amended with 0.01% Tween 20: *Neofabraea perennens* and (isolate 1864) *N. malicorticis* (isolate 1867) were inoculated at a rate of 1 x 10^3 conidia/ml. Inoculated fruit were allowed to dry overnight (8-12 hrs) at room temperature after which they were either dipped for 30 seconds in a PENBOTEC solution containing 500 ppm pyrimethanil or left untreated as controls. The fruit were allowed to drain then placed in 1˚C cold storage for 7 months.

Mean severity of postharvest decay for wound inoculated with Bull's-eye rot pathogens after harvest and kept for 7 months air storage at 1ºC.

Treatment	ppm	Decay Severity[1]	
		N. perennens	*N. malicorticis*
Untreated	-	32.6 a	51.4 a
Penbotec 400 SC	500	9.4 b	17.9 c

[1]Average lesion diameter (mm), The inoculation wound is 3.0 mm
Numbers followed by the same latter are not significantly different at the p=0.05 level according to the Duncan's multiple range test
Wound diameter is 3.0 mm i.e. no decay

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