

## Evaluation Report for Category B, Subcategory B. 3.10 Application

**Application Number:** 2010-0974  
**Application:** Add Tank-mix  
**Product:** Pyrinex 480 EC For Food Crops (Agricultural Insecticide)  
**Registration Number:** 23705  
**Active ingredients (a.i.):** Chlorpyrifos  
**PMRA Document Number :** 1975673

### Purpose of Application

The purpose of this application was to register the tank-mix of Pyrinex 480 EC and Bumper 418 EC Fungicide (containing the active ingredient propiconazole) for use on wheat, barley and oats.

### Health Assessments

As chlorpyrifos and propiconazole are currently registered for use on wheat, barley and oats, the proposed tank-mix use will not result in an increase in dietary exposure to these active ingredients.

### Environmental Assessment

The application rates and crops for both Bumper 418 EC and Pyrinex 480 EC fall within the registered uses of these two products. Therefore, the tank-mix of these two products on wheat, oats and barley is not expected to increase the environmental risk from propiconazole or chlorpyrifos. Environmental concerns are addressed through environmental statements on the product label.

### Value Assessment

Four insecticide trials on wheat and three trials on barley demonstrated that the tank-mix of Bumper 418 EC and Pyrinex 480 EC provided similar grasshopper control, crop yield or crop length compared to Pyrinex 480 EC used alone. No phytotoxicity was observed in these trials.

Five fungicide trials were submitted to support this tank-mix, three of which were not reviewed due to low disease pressure conditions. Two trials from Manitoba conducted on septoria-infected (*Septoria tritici*) hard spring wheat were analyzed. These trials were carried out under moderate to high disease pressure, i.e. up to 47% and 80% disease severity. At 20 days after treatment, Pyrinex 480 EC applied at 500 or 1200 ml/ha tank-mixed with Bumper 418 EC at 300 ml/ha provided similar levels of protection (average of 66% disease severity reduction) as the commercial standard Bumper 418 EC applied alone (average of 63% disease severity reduction). No phytotoxicity was noted in the trials. Since Pyrinex 480 EC did not interfere with the fungicidal activity of Bumper 418 EC on wheat septoria leaf spot, the tank-mix is expected to provide similar control the labelled spring barley and oat diseases.

The tank-mix of Pyrinex 480 EC and Bumper 418 EC at labelled rates for control of labelled insect and disease pests is accepted. Ground and aerial applications are supported, as both products are currently registered for ground and aerial application.

### **Conclusion**

The PMRA has conducted a review of the available information for this application and has concluded that the tank-mix of Pyrinex 480 EC and Bumper 418 EC is acceptable for full registration.

### **References**

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- 1872446 2009, Crop tolerance and insect control with Pyrinex tank mixed with fungicides, Bumper or Folicur in barley., DACO: 10.2.3.3(D),10.3.2(B)  
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