

# ***Streptomyces lydicus* strain WYEC 108 (006327)**

## **Fact Sheet**

### **Summary**

*Streptomyces lydicus* strain WYEC 108 is a naturally occurring bacterium that is commonly found in soil. When applied to soil mixes or turf grass, the bacterium protects the plant against a range of root decay fungi. *Streptomyces lydicus* strain WYEC 108 can also be applied to plant foliage in greenhouses to control powdery mildew. No harm to humans or the environment is expected from use of *Streptomyces lydicus* strain WYEC 108 as a pesticide active ingredient.

### **I. Description of the Active Ingredient**

*Streptomyces lydicus* strain WYEC 108 is a naturally occurring bacterium that is commonly found in soil environments. It is thought that the bacterium works by colonizing the growing root tips of plants and parasitizing root decay fungi (such as *Fusarium*, *Pythium*, and other species). The bacterium may also produce antibiotics that act against these fungi.

### **II. Use Sites, Target Pests, And Application Methods**

- **Use Sites:** Soil mixes (for potted plants and agricultural uses), turf grass, and plant foliage in greenhouses.
- **Target pests:** Root decay fungi such as *Fusarium*, *Rhizoctonia*, *Pythium*, *Phytophthora*, *Phytophthora*, *Phytophthora*, *Aphanomyces*, *Monosporascus*, *Armillaria*, *Sclerotinia*, *Postia*, *Verticillium*, *Geotrichum*. Other target pests include powdery mildew and other fungal pathogens that attack plant foliage.
- **Application Methods:** The single registered end product, "Actinovate Soluble" is mixed with water and applied as a soil mix or drench to turf grass or potted plants. The product can also be applied to plant foliage in greenhouses.

### **III. Assessing Risks to Human Health**

No harmful health effects to humans are expected from use of *Streptomyces lydicus* strain WYEC 108 as a pesticide active ingredient. No evidence of toxicity or infectivity was found in animal laboratory studies. Furthermore, the use of this bacterium in pesticide products will not increase the exposure of humans beyond normal background levels.

### **IV. Assessing Risks to the Environment**

No adverse environmental effects are expected when products containing *Streptomyces lydicus* strain WYEC 108 are used according to label instructions. Laboratory studies and a literature search found no evidence indicating that *Streptomyces lydicus* strain WYEC 108 is harmful to insects, birds, mammals, plants, or marine species. In addition, exposure to

wildlife is not expected to increase above background levels from the pesticide use of this bacterium.

## **V. Regulatory Information**

May 24, 2004 EPA grants registration (approval for sale and distribution) to one product containing *Streptomyces lydicus* strain WYEC 108 as the active ingredient: 1) "Actinovate Soluble" (end product)

## **VI. Registrant Information**

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## **VII. Additional Contact Information:**

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