



Evaluation Report for Category B.3.1,B.3.11,B.3.4 Application

Application Number: 2012-1179
Application: Application Rate Increase,New Pests,Application Method
Product: Influence WP
Registration Number: 29667
Active ingredients (a.i.): Garlic Powder [GRD]
PMRA Document Number : 2259626

Purpose of Application

The purpose of the application was to add the claim of suppression of the diseases damping off and root rot caused by *Pythium* spp. and *Rhizoctonia* spp. on the Influence WP label for use as a drench application on greenhouse cucumbers and tomatoes.

Chemistry Assessment

No chemistry assessment was required for this application.

Health Assessments

Influence WP is expected to have low toxicity irrespective of the routes of exposure. It is minimally irritating to the skin and eyes, and is a dermal sensitizer. Due to the irritative nature of garlic powder, inhalation exposure to spray drift during application may result in irritation of the respiratory tract.

The drench substrate application, at a higher rate of application than that registered for foliar spray on greenhouse tomatoes and cucumbers, will result in limited occupational exposure.

The current label statements for Influence WP are considered adequate to address any potential risk due to exposure of the mixer, loader, applicator, and/or bystander to the end-use product. Because of the potential for an allergic reaction in individuals sensitive to garlic, an appropriate precautionary label statement was required on the label.

Environmental Assessment

The drench application method and rate of application of Influence WP for greenhouse uses will result in limited environmental exposure. The active components of garlic are expected to degrade rapidly and, therefore, not expected to pose any risks to non-target organisms. Environmental concerns have been mitigated through adequate statements on the product label.

Value Assessment

Three greenhouse trials and four in-vitro trials were submitted to support the claim of

suppression of damping off and root rot caused by *Pythium* spp. on greenhouse cucumbers and tomatoes. Influence WP applied at 10 to 20 kg/300 m² provided between 0 and 88% increased germination compared to the inoculated control. The lower rate only partially suppressed damping off and root rot (0-19% increased germination; roots greatly affected with root rot). The highest rate (20 kg/300 m²) provided 69 to 88 % germination compared to 0% in the inoculated control and at that rate the roots were healthy or only lightly affected. A claim of partial suppression of seed root/pre-emergence damping off and root rot caused by *Pythium* spp. at the lower rate (10 kg/300 m²) and a claim of suppression at the higher rate (20 kg/300 m²) are supported.

Six in-vitro trials were submitted to support the claim of damping off and root rot caused by *Rhizoctonia* spp. on greenhouse cucumbers and tomatoes. A claim for partial suppression/suppression of seed root/pre-emergence damping off and root rot caused by *Rhizoctonia* is supported since Influence WP will be applied at the same rate and timing supported for *Pythium* spp. to suppress the same phases of seedling disease, but caused by *Rhizoctonia*. However, since *R. solani* only was tested, the claim will be supported for this pathogen only and not for *Rhizoctonia* spp.

Influence WP has value as an alternative fungicide in conventional and organic production. In addition, it can be used until the day of harvest which is an advantage compared to certain chemical fungicides.

Based on the efficacy from the greenhouse and in-vitro trials and the value of this product for conventional and organic growers, claims of partial suppression (10 kg/300 m²) and suppression (20 kg/300 m²) of seed root/pre-emergence damping off and root rot caused by *Pythium* spp. and *Rhizoctonia solani* on greenhouse cucumbers and tomatoes are supported.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of information available in support of Influence WP and has found the information sufficient to support the addition of the suppression of the diseases damping off and root rot caused by *Pythium* spp. and *Rhizoctonia solani* on the Influence WP label for use as a drench application on greenhouse cucumbers and tomatoes.

References

PMRA Numbers	References
2172626	2011, Value Summary, DACO: 10.1
2172627	2011, Mode of action, DACO: 10.2.1
2172628	2011, Description pest problem, DACO: 10.2.2
2172632	2011, Laboratory, DACO: 10.2.3.2
2172633	2011, Laboratory, DACO: 10.2.3.2
2172634	2011, Laboratory, DACO: 10.2.3.2
2172635	2011, Laboratory, DACO: 10.2.3.2

2172636	2011, Laboratory, DACO: 10.2.3.2
2172637	2011, Laboratory, DACO: 10.2.3.2
2172638	2011, Laboratory, DACO: 10.2.3.2
2172639	2011, Laboratory, DACO: 10.2.3.2
2172640	2011, Laboratory, DACO: 10.2.3.2
2172641	2011, Laboratory, DACO: 10.2.3.2
2172642	2011, Greenhouse and field trials, DACO: 10.2.3.3
2172643	2011, Greenhouse and field trials, DACO: 10.2.3.3
2172644	2011, Greenhouse and field trials, DACO: 10.2.3.3
2172645	2011, Greenhouse and field trials, DACO: 10.2.3.3
2172646	2011, Non safety adverse effects, DACO: 10.3.1
2172647	2012, Use Description, DACO: 5.2

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