

Evaluation Report for Category B, Subcategory 3.4 Application

Application Number: 2021-6276
Application: Changes to Product Labels – Application Method
Product: VectoLex CG Biological Larvicide
Registration Number: 28008
Active ingredient (a.i.): *Bacillus sphaericus* strain 2362
PMRA Document Number: 3381448

Purpose of Application

The purpose of this application was to amend the label for VectoLex CG Biological Larvicide to add application by remotely piloted aircraft systems (RPAS; i.e., drones).

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

Aerial applications are currently permitted for VectoLex CG Biological Larvicide. As there are no changes to the pests controlled, use sites, application rates, frequency or timing of applications, the level and routes of occupational and bystander exposure associated with remotely piloted aircraft systems (RPAS) applications are expected to be similar to that of traditional aerial applications with fixed-wing or rotary aircrafts.

The primary routes of exposure for workers involved in RPAS applications are dermal and inhalation, although ocular and oral exposure may also occur from fine particles that may be present in the end-use product (EP) formulation. Workers will be required to wear standard personal protective equipment (PPE) to mitigate risk from exposure.

Bystander exposure is possible near application areas; however, this exposure should be minimized if VectoLex CG Biological Larvicide is applied under the appropriate meteorological conditions. The granular nature of the EP is also not amenable to drift and the drift resulting from RPAS applications is not likely to exceed drift resulting from traditional aerial applications.

The microbial pest control agent (MPCA), *Bacillus sphaericus* strain 2632, is not pathogenic or infectious, and the formulation is of low toxicity to mammals.

The risks to workers and bystanders are acceptable when VectoLex CG Biological Larvicide is applied by RPAS and label directions are followed.

Toxicology and dietary exposure assessments were not required for this application.

Environmental Assessment

Traditional aerial applications are already permitted for VectoLex CG Biological Larvicide and there are no changes to the pests controlled, use sites, application rates, frequency or timing of applications. The measured amount of product applied using RPAS is comparable to traditional aerial applications. The calibration of the spreader, flight plan, reconnaissance flights and the use of electronic guidance equipment ensure that the appropriate amount of product is applied to the identified use sites. The granular nature of the EP is not amenable to drift and the drift resulting from RPAS applications is not likely to exceed drift resulting from fixed wing or rotary aircrafts. Therefore, no change in the level of environmental exposure and no additional environmental concerns are expected with application using RPAS. Environmental risks are acceptable when VectoLex CG Biological Larvicide is applied by RPAS and label directions are followed.

Value Assessment

Calibration data using a similar product registered for a similar use pattern and overall results from trials applying VectoLex CG Biological Larvicide by a remotely piloted aircraft system (RPAS) indicated performance comparable to that of conventional aerial application, for which the product was already registered. Application by RPAS allows treatment of sites to which access with ground or conventional aerial application equipment is difficult or impractical, as well as an alternative for other sites.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided and has found it sufficient to support the amendment to the product label for VectoLex CG Biological Larvicide.

References

PMRA Document Number	References
3294698	2021, DACO M1.2 VectoLex CG, DACO: M1.2
3294693	2019, Utilisation de drone pour le contrôle biologique des insectes piquers, DACO: M10.0
3294694	2020, Utilisation de drone pour le contrôle biologique des insectes piquers, DACO: M10.0
3294699	2021, Value Summary for the Use of Drones for aerial application of VectoLex CG, DACO: M10.0

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