

“*Drosophila suzukii* (spotted wing drosophila) biopesticide from a plant-based enzyme

THE INVENTION

Novel plant-based biopesticide showing high efficiency against *Drosophila suzukii*, more commonly known as spotted wing drosophila, that is becoming one of the major pests in America and Europe.

Innovative aspects and advantages

- 100% mortality in a lower concentration of pesticide than the industry standard (400 times lower concentration than Diflubenzuron, with only 20% of larval mortality).
- No toxicity effect on host plant from the pesticide.
- Environmentally friendly with reduced long-term effects on non-target organisms and the environment.

IP Rights

EP patent application [EP3638039A1](#)

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Summary

The *Drosophila suzukii* is causing severe economic damage to soft fruit crops in Europe and America. Only in the United States, economic damages are estimated at 500 million dollars per year.

Current management of *D. suzukii* focuses heavily on chemical control through Diflubenzuron insecticide, which has a very limited effect on larvae, leading to renewed pressure on crops, a need for additional tightly spaced sprays, and high costs. Additionally, it causes adverse environmental effects (resistance, mortality on non-targets).

A novel pesticide from a plant origin has been identified, showing great effectivity towards *Drosophila suzukii* larvae. Its effects on other pests (aphids, white fly, *T. Absoluta*) are currently being tested.

Figure 2 shows the results of *D.suzukii* larvae control vs treated with the novel biopesticide

Figure 1: strawberry infested fruits



Figure 2: *D. suzukii* larvae control vs Diflubenzuron vs biopesticide

