

Suppression of Sacbrood Virus

Commercialized under
licensed APQA patented
technology by Genolution Inc.
Patent No. 10-2317631

HoneyGuard-R Solution



GENOLUTION

01 HoneyGuard-R Solution

✓ Next-Generation RNA-based Veterinary Medicine for Honeybees

- Officially **approved as a veterinary drug** by the Korean regulatory authority.
- Specifically targets the mRNA encoding major structural proteins of the Sacbrood Virus (SBV), **inhibiting SBV replication and preventing disease** progression.
- **Environmentally friendly and sustainable solution** for honeybee health management.
- **Safety Proven** — Stable colony growth with no observed abnormalities and no impact on overwintering.

02 Mechanism

This process **inhibits viral replication and reduces transmission within the colony.**



1. Bees ingest
HoneyGuard-R Solution
diluted in sugar water



2. Bees deliver
the solution to larvae.

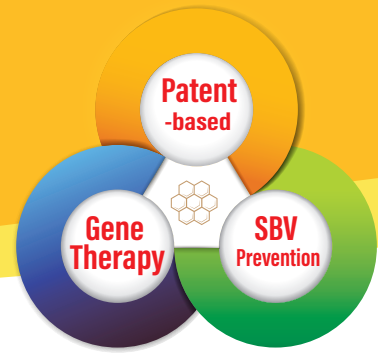


3. RNA interference is activated within honeybees and their larvae, leading to **sequence-specific degradation of Sacbrood virus RNA.**

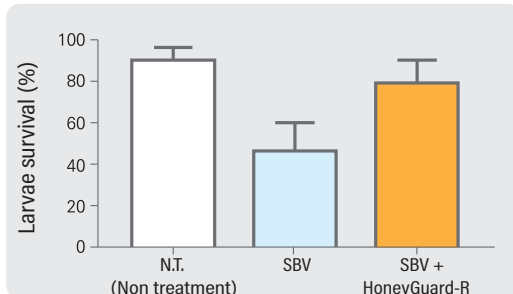
MANUFACTURED BY:

EAGLE VET

HoneyGuard-R Solution

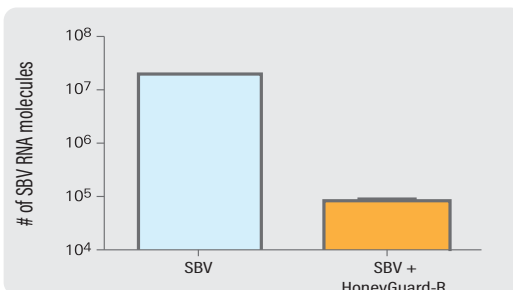


03 Efficacy



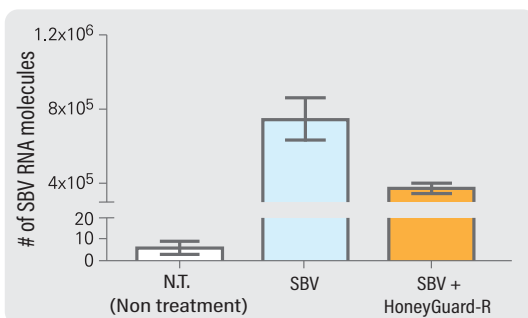
> Survival Increased

Oral administration of HoneyGuard-R Solution to larvae challenged with LD₅₀ SBV **increased survival by over 60%** compared to the positive control (SBV only).



> SBV viral load decreased in larvae.

~ **99% reduction in SBV viral load** in larvae.



> SBV viral load decreased in adult honeybee.

~ **50% reduction in SBV viral load** in adult honeybee.

04 Usage Instructions

Dosage

Mix 20 mL of HoneyGuard-R Solution with 280 mL of feeding solution (1 cup sugar + 1 cup water, based on paper cup).

Apply three times at 2-week intervals.

Administration

Recommended application periods:

- **Early March** (after overwintering)
- **August**, prior to the typical onset of Sacbrood disease outbreaks

* Approval standards under Korean regulations

Precautions

Use HoneyGuard-R Solution alone for optimal efficacy

