

UNMET NEED AND OPPORTUNITY

- Most of the commercial acaricide groups such as organochlorine, organophosphate, pyrethroids, formamidines, phenylpyrazole and macrocyclic lactones kill the ticks by acting on the nervous system of the ticks.
- Additional care should be taken to apply these acaricides on animals as they are toxic to animals and humans and necessitates the supervision of veterinarians.
- Resistance to acaricides has been reported and hence an effective, non-toxic, eco-friendly and residue free acaricides are the need of the hour for sustainable animal production and health.
- Nanomethicone is a novel patented, safe and eco-friendly acaricide formulation to control hard ticks and lice of companion animals and livestock.
- It acts against hard ticks and lice, by physically blocking their spiracles which makes them difficult to breath and eventually causes death of the ticks and lice.
- This product does not have residual acaricidal activity and requires periodic application for desired effect.



STAGE OF DEVELOPMENT

TRL7 technology, ready for scale up as per industry requirement.

UNIQUE SELLING PROPOSITION

- Eco-friendly, safe, odorless, locally acting, topical, and mechanical acaricide.
- Safest acaricide compared to the commercial acaricides as it consists of cosmetic grade chemicals.
- Leaves no chemical residues on animals.
- Kills the ticks by blocking the respiratory holes of ticks.
- Less prone for resistance development as it is a mechanical class acaricide.
- Improves the skin and hair coat of animals.

TECHNOLOGY

- It is an encapsulated 10% dimethicone silicon oil with 70 nm mean particle size in a suspension form.
- Encapsulation of dimethicone in Polyethylene Glycol (PEG) by oil emulsion method.
- This formulation blocks breathing hole (spiracle) of ticks, and kills them.
- The ticks in contact with this nano-formulation would drop-off or loosen their grip on animal body within 48-72 hrs.
- No need to cover the mouth of the animals after spraying nanomethicone as it is non-toxic.

LICENSINGOPPORTUNITY

BCIL is looking for suitable industrial partner for commercialization of this technology.

INTELLECTUAL PROPERTY

Patent granted in India.

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