Cyrex™ Liquid is an ideal solution for the treatment and long-term protection against blowfly strike. It contains two proven compounds that when combined, provide effective knockdown control of existing maggots and protects against blowfly strike for up to 12 weeks. Cyrex Liquid also provides knockdown control of lice.

Registered indications
- For the prevention and treatment of blowfly strike in all breeds of sheep for up to 12 weeks, including organophosphate resistant strains.
- For the treatment of lice on long wool Merino sheep (with greater than three months wool), including strains resistant to synthetic pyrethroids.
- For the control of lice on coarse wool breeds of sheep, including strains resistant to synthetic pyrethroids.

Mode of action
Cyrex Liquid contains 12.5 g/L of spinosad and 500 g/L of cyromazine, two proven active ingredients that combined, provide knockdown control and long-lasting protection against blowfly strike. Spinosad provides knockdown control of blowflies, maggots and lice. Cyromazine provides up to 12 weeks’ protection against blowfly strike. Both active ingredients pose minimal risk to livestock, operators or the environment, making them particularly suitable for use as wound dressings to treat existing blowfly strike.

Spinosad, the active ingredient in Extinosad™ Liquid, is a member of the spinosyn chemical family. Upon contact or ingestion, spinosad causes involuntary and prolonged tremors in the nervous system of susceptible species, leading to irreversible paralysis and death. Its unique mode of action kills blowflies, maggots and lice, including strains resistant to SP compounds. Studies have shown maggots treated with spinosad either die or vacate blowfly strike wounds within hours of treatment. Other studies have confirmed spinosad is highly effective against both adult and juvenile sheep biting lice.1 Extinosad Liquid also protects against blowfly strike for up to four weeks (Merino sheep) or three weeks (coarse wool breeds).2

Cyromazine, the active ingredient found in Vetrazin™, is an insect growth regulator. It interferes with life cycle of susceptible insects by preventing the development of larval stages.3 Note, however, that cyromazine has no effect on maggots until they begin to moult through to the next maggot stage. Cyromazine has a different mode of action to other IGR compounds, such as diflubenzuron (e.g. Fleecemaster® and Magnum®) and triflumuron (e.g Exit® and Zapp®). This different mode of action means there is no cross resistance between triflumuron/diflubenzuron resistant flies and cyromazine.4 Numerous studies have demonstrated the application of Vetrazin Liquid as a saturation dip protects against blowfly strike for up to 12 weeks.

Flystrike protection studies
Two studies have confirmed Cyrex Liquid provides the same level of protection against blowfly strike as Vetrazin Liquid, with the added benefits of knockdown blowfly strike treatment.

In the first trial, two groups of 104 two-tooth Romney ewes with seven weeks’ wool growth were treated with Vetrazin Liquid or Cyrex Liquid using a hand jet (2 L/head).5 A third group was left untreated as a control. All groups were run together as a single mob and monitored two or three times per week.

Table 1: Accumulative strike rate (%) – Nuhaka, Hawkes Bay5

<table>
<thead>
<tr>
<th>Weeks after treatment</th>
<th>Untreated</th>
<th>Vetrazin Liquid</th>
<th>Cyrex Liquid</th>
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Preventing blowfly strike with Cyrex

TECHNICAL UPDATE
TECHNICAL UPDATE

Preventing blowfly strike with Cyrex

The fly challenge was low until Week 5 and intense from Weeks 5 to 9. A total of 21 sheep were struck during the investigation: 14 from the untreated group, six from the Vetrazin Liquid group and one from the Cyrex Liquid group. All struck sheep were treated with Cyrex Liquid. No re-strikes were recorded. This trial indicated Cyrex Liquid provided effective long-term protection against flystrike under high challenge.

In the second trial, four groups of 100 Romney ewes with five weeks’ wool growth were treated with Vetrazin Liquid or Cyrex Liquid using a Dutjet handpiece (2 L/head) or Electro dip automatic jetting race (1 L/head). A fifth group was left untreated as a control. In this study, Cyrex Liquid provided a similar level of protection against blowfly strike as Vetrazin Liquid under an extremely high blowfly challenge. The incidence of blowfly strike in hand-jetted sheep was lower than those treated using an AJR, presumably due to the higher volume of wash applied.

Summary

Cyrex Liquid is an ideal solution for the treatment and prevention of blowfly strike on sheep:
- Two proven active ingredients
- Knockdown control of blowflies, maggots and lice
- Effective against resistant strains
- Up to 12 weeks’ protection against blowfly strike
- Minimal risk to livestock, operators or the environment
- Can be used on all classes of sheep
- 7 day meat withholding period

Table 2: Accumulative strike rate (%) – Kotemaori, Hawkes Bay

<table>
<thead>
<tr>
<th>Weeks after treatment</th>
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<th>Vetrazin Liquid</th>
<th>Cyrex Liquid</th>
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References:

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