CYDECTIN TriclaMox Pour-On Solution for Cattle

PERSISTENCY AGAINST STOMACH WORMS AND LUNGWORMS, AND FOR LICE-FREE GUARANTEE

CYDECTIN TriclaMox Pour-On has a persistent effect in preventing re-infection by stomach worms (*Ostertagia ostertagi*) and lungworms (*Dictyocaulus viviparus*) for 5 weeks after a single dose. It is the only pour-on fluke and wormer with persistent action against worms.

CYDECTIN TriclaMox also has a licence for biting and sucking lice.

Dosing guide

**Spring dosing**
If cattle are treated with CYDECTIN TriclaMox Pour-On at housing, this should reduce the need for a fluke treatment in the spring. At turnout, use CYDECTIN Pour-On for Cattle, which has an 8-10 week dosing interval. Outwintered cattle at risk from fluke and worms should be dosed in the spring with CYDECTIN TriclaMox Pour-On to reduce the risk of production losses and further pasture contamination.

**Mid-season dosing**
Where there is a risk of fluke, use CYDECTIN TriclaMox Pour-On as the mid-season dose (around May) to kill fluke ingested since turnout and help to reduce pasture contamination. This is especially important if cattle are turned out to graze early in the spring.

Life cycle of liver fluke

Chronic fluke infection
Acute fluke infection

Time from uptake of metacercariae to fluke eggs in faeces = 10-12 weeks. Minimum time needed for 1 life cycle is 17-19 weeks.
COMPARATIVE EFFICACY STUDY AGAINST FLUKE

Objective
• To evaluate the efficacy of CYDECTIN TriclaMox Pour-On for Cattle
• Against 6 and 8-week-old immature and 12-week-old adult stages of the liver fluke (Fasciola hepatica) in cattle
• Compared with untreated controls and treatment with other commercially available products

Method
• 104 Holstein-Friesian calves divided into groups
• Infected with liver fluke metacercariae on day 0
• 1 group remained untreated as a control
• Treated groups received either:
  – CYDECTIN TriclaMox Pour-On
  – ivermectin plus closantel pour-on
  – ivermectin plus clorsulon injection
• Treatments were given 6, 8 or 12 weeks after infection
• Flukes were counted 14 to 15 weeks after infection

Results
• CYDECTIN TriclaMox-treated cattle had significantly lower fluke counts than untreated cattle
• CYDECTIN TriclaMox showed significantly higher efficacy (P<0.0001) against 6-and 8-week-old fluke than either of the other treatments

Conclusions
• The results of the study confirm the efficacy of CYDECTIN TriclaMox against a range of stages of liver fluke maturity
• These differences in efficacy have important implications for their use in liver fluke control programmes
• Helps to control production losses


For details on lice-free guarantee please see page 59
**HOUSE HEALTHY CATTLE**
**KILL FLUKE AND WORMS TOGETHER**

As winter draws near cattle will be carrying a mixed burden of fluke (*Fasciola hepatica*) at different stages of development. All stages of fluke (early immature, late immature and adult) cause production losses.

Most flukicides only control adult and late immature fluke. Traditionally farmers have housed cattle for 1-2 months, reducing the control of lungworm and stomach worm, then treated with a drug that removes all the late immature and adult fluke. Effectively they are tolerating the loss of production that has occurred since all the immature fluke were picked in the late summer/autumn.

Using CYDECTIN TriclaMox as a pre-housing winter dose will not only remove all the lungworm and stomach worm but it will also significantly reduce the burden of all stages of fluke and allow the housing of healthier cattle.

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**TREAT**
Treat with an appropriate alternative flukicide to turn out clean cattle

**HOU**
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TURN OUT

- Immature fluke migrate through the liver tissue causing damage, reducing productivity and predisposing to clostridial disease.
- Adult fluke live in the bile ducts and drink up to 0.5ml blood per day, a moderate burden can mean approximately a litre of blood loss a week.
- The cost of fluke to the UK industry has been estimated at £23 million comprising of reduced daily live weight gain, reduced fertility, reduced milk production and treatment costs.
- AHDB figures show cattle with a burden require an extra 80 days to reach slaughter weight costing between £25 and £35 per head.
- With regard to fertility, studies have shown reduced reproductive performance in bulls, reduced conception rates in herds, increased age to 1st oestrus of 39 days and in adults an increased calving interval of 4.7 days on affected farms.

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**Example Grazing Season**

- JUNE: Calf Grazing
- JULY: Calf Grazing
- AUGUST: Calf Grazing
- SEPTEMBER: Calf Grazing
- OCTOBER: NO TREATMENT
- NOVEMBER: NO TREATMENT
- DECEMBER: NO TREATMENT
- JANUARY: NO TREATMENT

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**Proportion of Fluke Stages:**
- **E:** 30% effective
- **L:** 53% effective
- **A:** 99% effective

- *Ivermectin and closantel injection*
- *E: 27% effective
  - L: 90% effective
  - A: 99% effective*

- *Moxidectin and triclabendazole pour-on as follows:
  - CYDECTIN TriclaMox® Pour-On has been shown to be 90% effective against early immatures, 99.5% against late immatures and 99.9% against adults.*
  - A Pre-housing winter dose of CYDECTIN TriclaMox® will remove lungworm and stomach worms and due to its persistence will ensure that cattle will remain free of these worms for 5 weeks meaning no need for re-dosing if housing occurs before then.

**Metacercariae Encyst:**
- Cercariae ingest ed
- Eggs accumulate on pasture
- Moist habitat

**Fluke Migrates to Bile Ducts:**
- Eggs hatch – miracidia
- Fluke migrates to bile ducts

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**Note:** Timothy was pre-treated ahead of the 12 weeks of artificial infection to establish efficacy of early immatures, late immatures and adults and a mixed infection.
TRICLABENDAZOLE AND RESISTANCE

Resistance to wormers and flukicides is increasing. Farmers should use medicines responsibly to delay the development of resistance. Farmers should assess the resistance status on their farm and then use the most appropriate product as recommended by their SQP or vet.

Triclabendazole has efficacy against the widest range of fluke maturity, which helps maximise the production benefits of fluke control.

Reduced efficacy of triclabendazole has been reported; however, very few cases of resistance have been proven. Reduced efficacy is often attributed to other management factors, which should be explored thoroughly.

Under dosing
- Underestimation of bodyweight
- Inadequate maintenance of equipment
- Poor treatment techniques
- Failure to follow manufacturer’s instructions

Use of incorrect drug for target parasites
Re-introduction of animals onto heavily contaminated pasture
Incorrect diagnosis (signs not caused by parasitism)
Anthelmintic resistance
- Prevalence may be overestimated

In the case of suspected reduced efficacy to CYDECTIN TriclaMox, Zoetis offers a support guarantee aimed at establishing the cause and determining the triclabendazole resistance status of the farm.

The CYDECTIN TriclaMox Support Guarantee offers a technical service second to none and ultimately peace of mind. It includes:

- **Thorough on-farm investigation** within 12 weeks of dosing
- **Comprehensive laboratory investigation** using the most up-to-date techniques, at an independent reference laboratory known worldwide for its expertise with liver fluke.

Contact your account manager for further details.