



ACELEPRYN®
STAY IN THE ZONE
TO TARGET KEY
TURF SOIL PESTS

 **Acelepryn®**

syngenta.

TARGETED PREVENTION OF LEATHERJACKET AND CHAFER GRUB DAMAGE IN TURF

Leatherjackets and chafer grubs can result in extensive damage to turf surfaces through:

- Plant loss and sward thinning from pest feeding activity on turf roots
- Damage to surface consistency through larvae feeding
- Secondary damage from birds and animals searching for larvae

Turf surfaces affected by leatherjackets and chafer grubs are subjected to greater stress and more susceptible to further challenges.

The impact of soil larvae grubs is estimated to cost the UK up to £86 million a year in lost revenue and damage mitigation.

The Acelepryn label covers control of leatherjackets and chafer grubs in golf greens, tees, fairways and roughs, sports pitches, racecourses and gallops, bowling greens, airfields, and professional application to commercial and residential lawns, subject to specific restrictions on the % of the area being treated.



Sports pitches
loss of turf cover and consistency of playing surfaces



Horse racecourses and training gallops
loss of surface stability for horses



Airfields
risk of bird strike from large flocks feeding on grubs

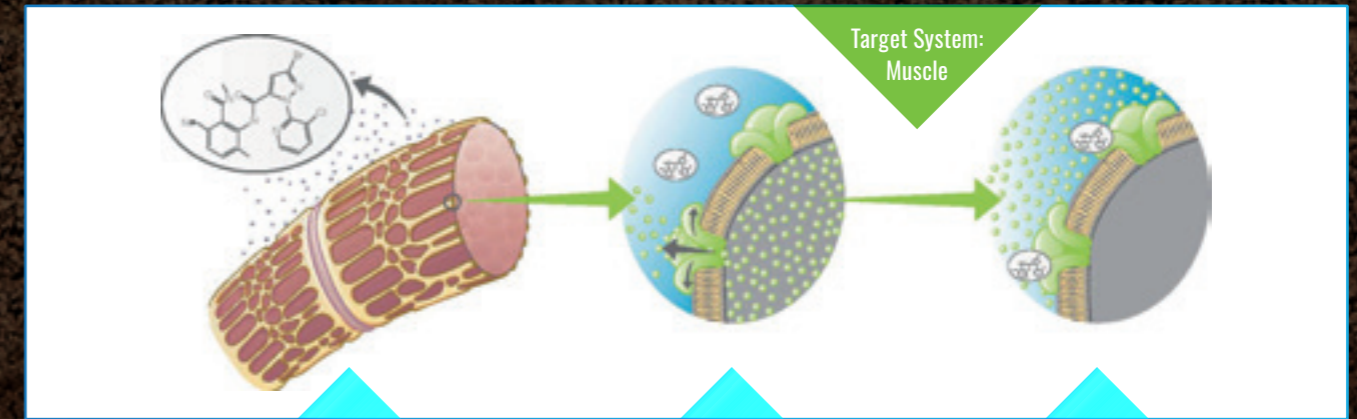


Residential lawns
loss of turf cover

UNIQUE MODE OF ACTION

Acelepryn contains the novel insecticide, chlorantraniliprole, formulated as an easy to use liquid treatment for accurate spray application on turf surfaces using a knapsack or boom sprayer.

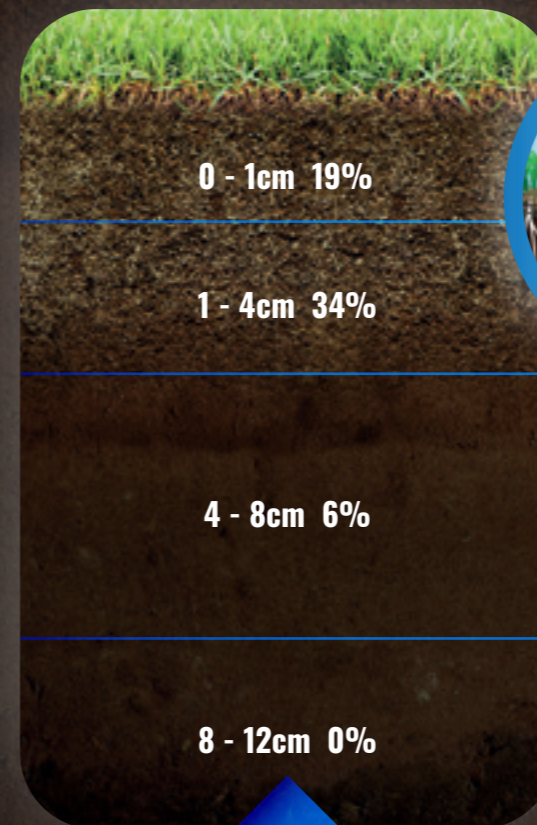
The active ingredient in Acelepryn specifically affects the nerve receptors of target insect pests. Non-target organisms with different cell structures, including birds, mammals and fish, are not affected.



Larvae ingest Acelepryn during feeding

Inside the larvae chlorantraniliprole takes effect on the nerve receptors

Target insects are paralysed. Larvae at the 1st to 2nd instar stage are killed, although larger larvae may recover



Acelepryn works primarily through ingestion by the target pest as it feeds on organic matter in the soil.

Benefits of Acelepryn retention in the top layers of the soil profile include:

- Targets soil pests moving up to the surface
- Good results over a prolonged period
- Minimal environmental loss of product

Once Acelepryn has moved into the target application zone, it can provide at least two months of soil pest control.

Moist soils, irrigation and natural rainfall can all enhance the efficacy of Acelepryn by encouraging target pests to stay near the surface.

Acelepryn should be applied to ensure maximum concentration in the target zone at the time of specific target pests' early larval stage activity. See page 5-6.

4 months after application 59% of original application was still present in the soil

Always read the label for specific areas of turf to be treated prior to application.

(Source: FR 20 1042 April 2021)

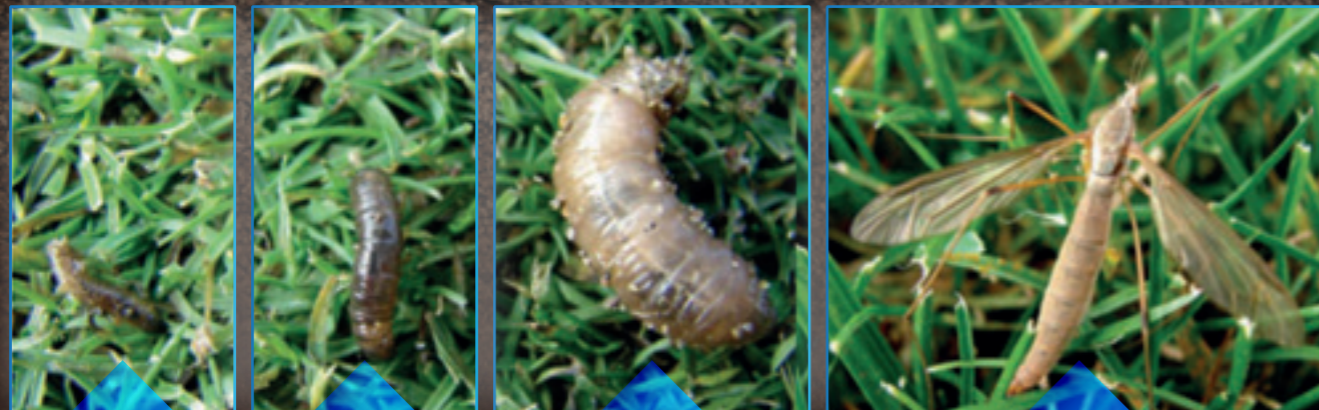
EARLY HIT ON LARVAE TARGET

Acelepryn is most effective in targeting the early stages of insect larvae, principally 1st and 2nd instar stages of the life cycle. Larger grubs of later instar stages may survive a period of paralysis induced by treatment and could recover.

For the most effective targeting of leatherjacket and chafer grub, Acelepryn treatments should be applied preventatively to coincide with egg hatch and early stages of larvae activity.

Results of independent trials using Acelepryn have recorded up to 90% reduction in leatherjackets per m² on a golf green (UK, 2016). Other trials have resulted in 85% reduction of Welsh chafer grubs in a single season (UK, 2017).

Where Acelepryn has been used as part of an Integrated Pest Management approach trials have shown potential for 100% control of leatherjackets (France, 2022).



1st Instar

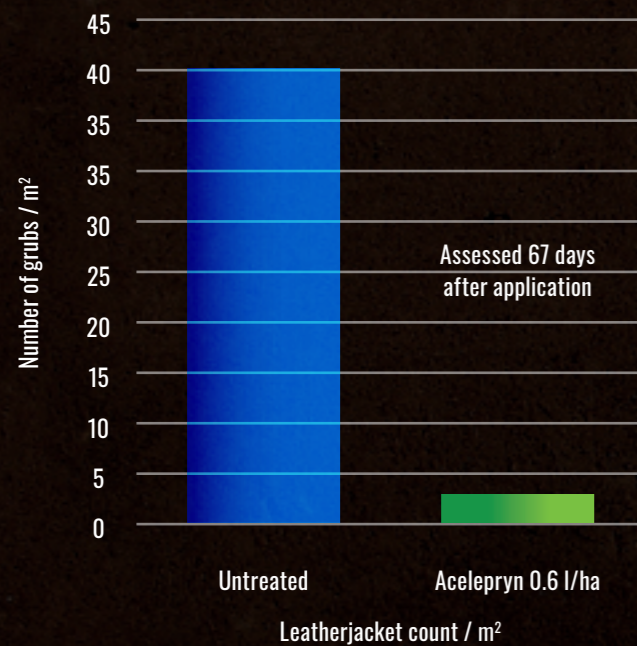
2nd Instar

3rd Instar

Adult

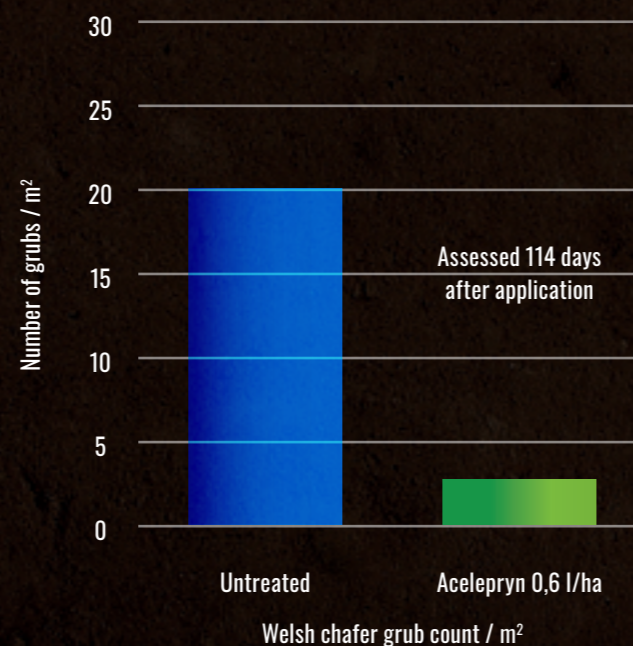
Acelepryn acts only on 1st and 2nd instars

Control of leatherjackets (*Tipula paludosa*)



Brooms Barn, UK. Application 23rd September 2016.

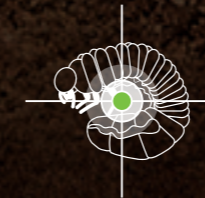
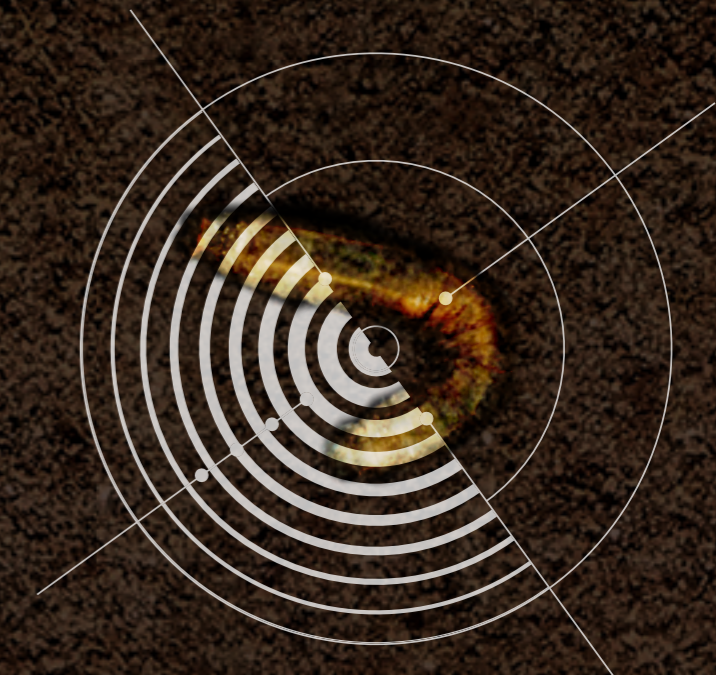
Control of Welsh chafer (*Hoplia philanthus*)



Suffolk, UK. Sandy loam. Application 13th June 2017.

GETTING THE BEST FROM ACELEPRYN

YOUR 7 POINT PLAN FOR APPLICATION



1 Apply preventatively. Acelepryn is only effective on 1st and 2nd instar. Larger grubs / larvae will not be controlled.



4 Apply at 0.6L/ha, in a minimum of 600 litres of water, using a Syngenta XC soil nozzle or suitable air induction O8 nozzle between 2 - 4 bar pressure.



2 Chafer grubs: Apply once peak flight has been observed (typically June).
Leatherjackets: Adult crane fly activity may not peak until mid-October. Always check peak flight has occurred for application timing.



5 Ensure the soil profile is not hydrophobic at the time of application. Syngenta wetting agent Qualibra® is compatible with Acelepryn for convenient application in tank-mix or sequence.



6 Keep surfaces irrigated where possible, to attract pest larvae to towards the surface.



3 Mow prior to application.



7 Delay mowing for as long as possible and return the clippings if feasible.

USE ACELEPRYN AS PART OF AN ITM PROGRAMME, INCLUDING POTENTIAL FOR CULTURAL PRACTICES AND COMPLEMENTARY NEMATRIDENT PREDATORY NEMATODE TREATMENTS.

OPTIMUM APPLICATION TIMINGS

LEATHERJACKETS

Leatherjackets are the soil dwelling larvae stages of crane fly. The most widely seen and most problematic in the UK is the European crane fly, *Tipula paludosa*, commonly known as daddy long legs.

Leatherjackets occur nationwide and are most widely associated with loam or clay soils with higher organic matter content. They are favoured by moist conditions.

Successive seasons of pest monitoring on the Syngenta Pest Tracker website has identified the optimum Acelepryn application to target early larval activity.

Adult crane fly activity may not peak until mid-October. Always check peak flight has occurred for application timing.

New Syngenta research indicates Acelepryn treated larvae may be more susceptible to NemaTrident nematode attack, with increased levels of control even on larger 3rd instar larvae.

Adapting aeration practices and maintaining soil moisture levels in the upper soil profile has been shown to further enhance results for early instar leatherjacket control.



CHAFER GRUBS

Chafer grubs are the highly distinctive soil-borne larval stages of several different scarab beetle species.

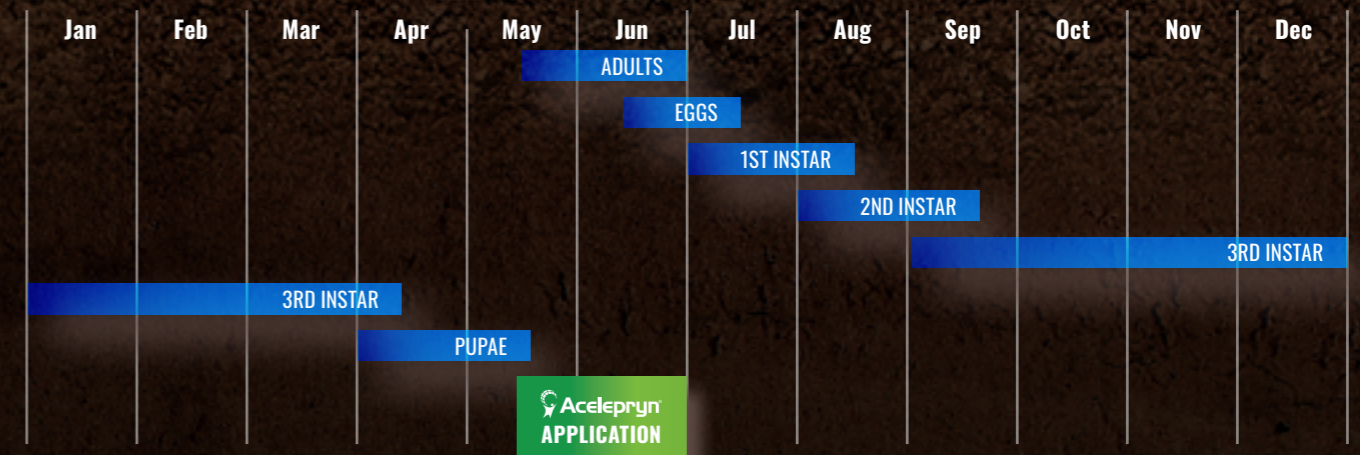
Chafer grubs are a greater problem on light, open sandy soils that are well drained.

Pheromone traps can be used to determine adult beetle activity. Locations with previous damage are at an 80% chance of suffering repeat damage.

Each beetle species has a different life cycle, that will need to be addressed with Acelepryn treatment programmes. Flights of different species can occur from early May to the end of August.

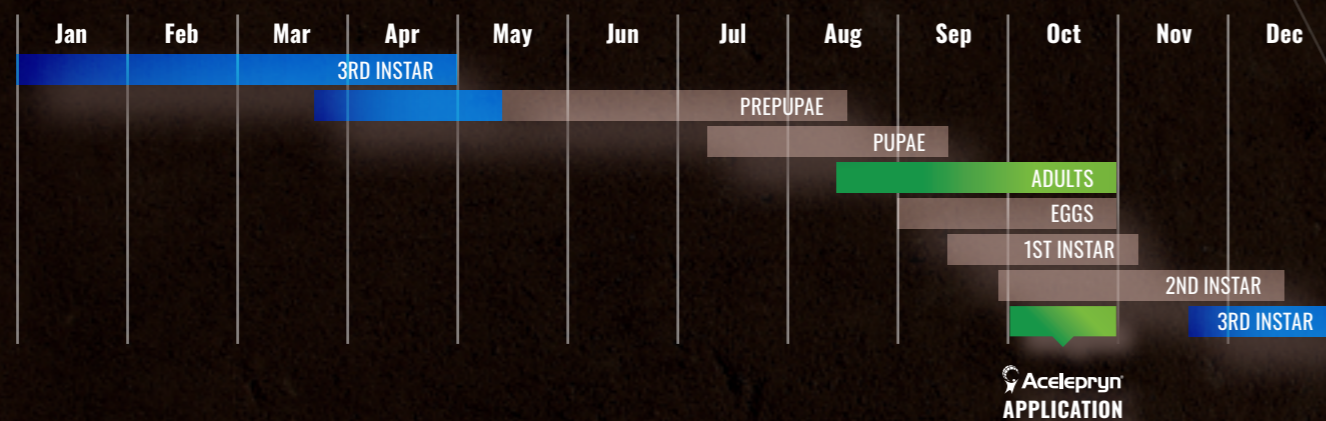


Acelepryn timing for garden chafer



Note: Adult beetles for summer and cockchafers can emerge over periods and through to July or even August. Monitor regularly for peak flight periods.

Leatherjacket life cycle and Acelepryn timing



To target chafer grubs at the most effective early larval stages, the optimum timing for Acelepryn application is at the time of peak flight and egg laying of adult beetle.

The aim is to have the product into the soil target zone at the time of egg hatch and early instar activity. Once larvae reach the third instar stage results and reliability of control could be significantly reduced on the larger larvae.

Larvae of scarab beetle species with multi-year life cycles, such as the cockchafer, may only be controlled with Acelepryn in their first year while still small early instars; older instars may still emerge as adults in subsequent seasons. Successive years of annual treatment may be required to obtain effective long-term control of pest populations.



Areas of use:	Golf greens, tees, fairways and roughs, sports pitches, racecourses and gallops, bowling greens, airfields, and professional application to commercial and residential lawns, subject to specific restrictions on the % of the area being treated.
Rate of application:	0.6 litres/hectare.
Water volume:	500 - 600 litres/hectare.
Number of treatments:	One per season.
Application technique:	Application with conventional sprayer, walk-over sprayer or knapsack. Use White Syngenta XC Turf Nozzles to move spray down to the soil.
Best use advice:	Apply in moist conditions to encourage the target pest to move to the surface area.

*Restrictions may apply on the proportion of any area that may be permissibly treated with Acelepryn. Always read the label before use for specific areas and stipulations.

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Always read the label and product information before use. For further product information including warning phrases and symbols refer to

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