

**ConFor Technical Information Note** (draft)  
**Using Contest Insecticide for the control of  
the Great Pine Weevil (Hylobius) in Forestry**

**Contest** insecticide has gained an offlabel approval for use as a post planting spray, and for use by forest nurseries over cell grown transplants.

Contest contains alpha-cypermethrin, the same insecticide contained in Alphaguard, which was revoked for UK use on 31st August 2006. Contest is formulated as water dispersible granules which reduce the level of potential operator hazard.



Contest protects trees in three ways, as a deterrent, anti feedant, and as a stomach poison. This triple action ensures that Contest is both effective and reliable for a period of between 6 and 12 weeks from application.

**Using Contest as a Post Planting Spray**

**Timing**

Apply April - June & again from August to end October to coincide with the main periods of attack. Spray interval is minimum 8 weeks, & no more than 24 weeks.

**Mixing**

Mix 6.7gm product per litre of water.

Contest may be measured by volume, so for a 5 litre spot gun, a measure of 33.5gm will be the direct equivalent of 33.5ml as measured using a small (100 ml) jug or measuring cylinder. The granules may be poured directly into the spotgun before half filling with water & shaking vigorously until completely dispersed. Then complete filling.

**Application rate to larger transplants**

20ml of the solution should be applied to completely encircle the lower 6" of the stem of the transplant. Spraying over the top of the plant is NOT sufficient.

Assuming 2500 plants per ha, then 330gm Contest will be required to treat 1 ha, using 1 litre of diluted solution per 50 trees, (50 litres diluted spray/ha).

**Application rate to smaller transplants with less dense foliage**

A reduced rate of 10mls per tree may be sufficient. At 2500 plants per ha, 165g Contest will be required to treat 1 ha, using 1 litre of diluted solution per 100 trees, (25 litres diluted spray/ha). This does not contravene the conditions of approval as the dilution rate of 6.7gm/l water has not been increased.

**Application systems**

Apply using a spot gun, or a battery driven knapsack sprayer emitting a measured dose. Non metered knapsack sprayers may be less suitable due to the difficulty of delivering an accurate dose to each tree. The first 15cm (6") of stem must be completely treated. This may mean applying two half doses to either side of the stem.

**Suggested Nozzles**

Evenspray flat fan jet (in the vertical plane). eg Lurmark 02E80. Alternatively use a narrow cone jet. eg Lurmark 90 B1 FP 1.0. This may require thread adapters.

**Operator Protection**

Read AFAG leaflet 202 (available free from HSE Books 01787 881165).

*Continued on back page*

Wear impermeable coveralls, nitrile gloves, rubber boots at all times when handling the concentrate or diluted product.

**Environmental Protection**

Contest is very toxic to aquatic organisms. Good spraying practice must be observed to prevent contamination of ditches and watercourses with spray, washings or containers.

**Nursery Pre treatment of Cell Grown Plants**

This operation uses considerably higher concentrations than post planting treatments, and should normally provide protection throughout the year of planting.

**Distribution and Supply**

Contest is widely used in agriculture, & is available from most pesticide suppliers.

**Conditions of Approval**

It is a condition of approval that the Notice of Approval as reproduced in this leaflet is held by the all those concerned with the application.

As with all offlabel approvals, this use is entirely at the users own risk.

**Further Information**

**The Weevil**

*Hylobius abietes* is a large weevil which damages transplants by feeding on living bark, often completely ring barking the tree. leading to heavy losses and remedial measures estimated to cost to foresters of £4 - 8 million per year.

**Life Cycle**

Eggs are laid in felled conifer stumps in April / May, with felled Lodgepole Pine sites generating particularly high infestations. Adults emerge from the subsequent larvae some 8 weeks later, allowing two generations per year to be produced, with the adults living for up to four years.

**Key Periods of Damage**

Adult weevils can damage trees at any time of the year providing it is warm enough to encourage feeding.

However the two critical peaks of damage tend to occur between April and June, and between August and end of October.

**Factors leading to damage**

Weevil populations come from mature trees previously felled at the planting site, or can fly in from other plantations in the locality attracted by aromatic chemicals released by trees at the time of felling. Heavy infestations can result in a potential population of up to 20 weevils per sq metre.

**Tree Species at Risk**

All crop species can be attacked, with conifers at particular risk.

As a rule, spruce and pines (particularly late flushing provenances of Scots Pine) will be susceptible to damage for at least two years after planting, and Douglas Fir for a possible further two years.

Oak and beech are less susceptible to attack, while interplanting with the hybrid Lime species *Tilia vulgaris* appears to actually deter the weevil from feeding.

**Silvicultural Techniques to Reduce Weevil Attack.**

1. Delay planting for at least three seasons to allow a decline in population levels.
2. Plant less sensitive species.
3. Plant larger transplants - these are more likely to survive attack.
4. Leave any brush mat undisturbed - can reduce feeding of crop stems.
5. Use the FC Management Support System to predict the likely severity of attack.
6. Consider using FC contract services to reduce *hylobius* infestations with nematodes.

**NOTICE OF APPROVAL Number: 2391/2006**  
**FOOD AND ENVIRONMENT PROTECTION ACT 1985**  
**CONTROL OF PESTICIDES REGULATIONS 1986 (S.I. 1986 NO. 1510):**  
**APPROVAL FOR OFF-LABEL USE OF AN APPROVED PESTICIDE PRODUCT**

This approval provides for the use of the product named below in respect of crops and situations, other than those included on the product label. Such "off-label use", as it is known, is at all times done at the user's choosing, and the commercial risk is entirely his or hers.

The conditions below are statutory. They must be complied with when the off-label use occurs. Failure to abide by the conditions of approval may constitute a breach of that approval, and a contravention of the Control of Pesticides Regulations 1986 (as amended). The conditions shown below supersede any on the label which would otherwise apply.

Notice is hereby given that in exercise of the powers conferred by Regulation 5 of the Control of Pesticides Regulations 1986 (SI 1986/1510) (as amended) and of all other powers enabling them in that behalf, the Secretary of State and the Scottish Ministers (as regards Scotland) and the National Assembly for Wales and the Secretary of State (acting jointly as regards Wales) have given

*Level and scope:* full approval for the use of

*Product name:* Contest containing

*Active ingredient:* 15 % w/w alphacypermethrin

*Marketed by:* BASF Plc under MAPP Number 10216 subject to the

*Date of expiry:* 31 December 2010 (subject to the continuing

conditions relating to off-label use set out below:  
approval of MAPP 10216).

**Use:**

*Field of use:* **ONLY AS A FORESTRY INSECTICIDE**

*Crops/situations:*

Forest:

*Maximum individual dose:* (6.7g product / litre)

*Maximum number of treatments:* (2 per year)

Forest nursery

*Maximum individual dose:* (26.7g product / litre)

*Maximum number of treatments:* (2 per year)

*Operator Protection:*

(1) Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

Operators must wear:

suitable protective clothing: ( impermeable coveralls),

suitable protective gloves

and rubber boots

when applying the product to container-grown forestry transplants as a pre-planting treatment, or post planting spot-treatment, or when handling freshly treated material.