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Current Issues

1. Late Sown Crops and BYDV Risk
2. Kdr Aphicide Resistance
3. Beneficials and Bees

Late Sown Crops and BYDV Risk

BYDV is a virus borne disease of cereals that is transmitted by aphids feeding on the crops. Three types of aphids are primarily involved, the Grain aphid (*Sitobion avenae*), the Rose-grain aphid (*Metopolophium dirhodum*) and the Bird-cherry oat aphid (*Rhopalosiphum padi*). The grain aphid is the most widespread in Ireland. It moves into crops either by walking as a wingless aphid or by flying into the crop as a winged adult. It then proceeds to feed and breed on newly emerging crops. The grain aphid is very hardy and can increase in number during mild winters.

Crops sown in late March and April are at most risk. By GS 31 the crops are more tolerant and yield loss is lower. Spring barley yield losses can be as high as 1.99t/ha (T. Kennedy, Teagasc).

Sowings this year are likely to be delayed due to the wet spring. The mild winter has led to high numbers of aphids, which are likely to attack early April emerging crops.

RISK OF BYDV INFECTION IS LIKELY TO BE VERY HIGH
ONLY PRODUCTS WITH HIGH EFFICACY AND PERSISTENCE SHOULD BE USED

Knock-Down Resistance (Kdr) to Pyrethroid Insecticides

Grain aphids with resistance to pyrethroid sprays have been detected in Ireland in 2013. These incidences of resistance are, however, at low levels, and field performance is likely to remain unaffected. For further information, check out the papers delivered at the 2014 Teagasc National Tillage Conference – click on the link below ;

http://www.teagasc.ie/publications/view_publication.aspx?PublicationID=3101

Current Advice is:

1. Reduced Doses of Pyrethroids are no longer advisable – keep rates up
2. If diminished control is found, live aphids should be sent to Teagasc Oak Park to determine if resistance is present
3. If resistance is suspected a non – pyrethroid spray should be used (e.g. Pirimicarb or Chlorpyrifos).



Sumi Alpha - Spring 2014

Goldcrop recommend that Sumi Alpha should be applied at **165 ml/ha from GS13** on spring cereals (i.e. 1 pack per 6 hectares / 15 acres). Two applications are permitted.

There is a new recommendation for the use of Sumi Alpha for the control of summer aphids.

Sumi Alpha and Beneficials

Predators of aphids, such as ground beetles, spiders and ladybirds play an important role in reducing numbers and should be encouraged.

Studies have shown that Sumi alpha is the safest pyrethroid spray on non target species of insects – including bees.

GOLDCROP RECOMMENDATIONS SPRING 2014

Sumi Alpha has the **highest persistency** of any pyrethroid. This will be very important this spring when work load demand is at its' very highest.

Sumi Alpha is **very slow to break down** in sunlight, a traditional weakness in pyrethroids.

Sumi Alpha is **highly repellent** to invading aphids.

Sumi Alpha is the **safest pyrethroid** on beneficials and bees

Crops	Rate	Timing	Maximum Total Dose
WINTER CEREALS			
Winter Wheat, rye and triticale	2 x 165 mls	Before GS32	530 mls
	1 x 200 mls	GS32 to GS77	
Winter Barley and Winter Oats	2 x 165 mls	Before GS32	530 mls
	1 x 200 mls	GS32 to GS73	
SPRING CEREALS			
Spring Wheat, Rye and Triticale	2 x 165 mls/ha	Before GS32	530 mls
	1 x 200 mls/ha	GS32 to GS77	
Spring Barley and Spring Oats	2 x 165 mls/ha	Before GS32	530 mls
	1 x 200 mls/ha	GS32 to GS73	

Off Label Approvals:

Crops	Rate	Maximum Total Dose
Field Beans	2 x 165 mls	330 mls
Combining and Vining Peas	1 x 330mls	330 mls
Broccoli, Brussel Sprouts, Chinese & Head Cabbage, Calabrese, Cauliflowers, Kale, Kohl-Rabi	2 x 165 mls	330 mls