

### Alteration to the New Off-label Approvals for Flumioxazin in vining peas, carrots, parsnips and bulb onions

The residual and contact-acting herbicide, flumioxazin, available as SumiMax, Digital and Guillotine, was granted some new off label approvals (SOLAs) for use in vining peas, carrots, parsnips and onions, just in time for the season. These SOLAs were applied for by the Horticultural Development Council (HDC), who conducted the efficacy and selectivity work. The HDC has subsequently asked CRD to change the limitation of one application per crop to multiple applications providing the maximum total dose is not exceeded. This request has been granted which has resulted in a more flexible option for growers looking to control various problem weeds in these crops. There are no other changes in the conditions of use such as timing or harvest intervals. However the SOLA numbers have changed.

#### Summary

The new SOLAs for flumioxazin products (SumiMax, Guillotine, Digital) for use in vining peas, carrots and onions have been altered to permit multiple low doses. Other conditions of use remain unchanged but the SOLA numbers have altered. Users should gain experience by treating small crop areas before widespread use.

#### VINING PEAS (SOLA 1109, 1115, 1117, replaces 0952, 0955, 0958 of 2009)

The SOLA is for the control of volunteer potatoes, which are a problem in this crop as potato berries are toxic and of a similar size to peas and are difficult to remove at the factory. Their presence in vining pea samples may lead to crop rejection and so can have a significant economic impact. Flumioxazin will also control a range of weeds including cleavers, charlock, chickweed, pansy, red dead-nettle, mayweed, groundsel and nightshades at 1-3 leaves in size and particularly when soils are moist. There is limited information on varietal safety. Check with PGRO.

#### Rate and Timing

Applied at **up to a total dose of 100 ml/hectare**, SumiMax, Digital and Guillotine can be sprayed post crop emergence from 5 true leaves to before flowers buds are visible (BBCH 15-51). The crop must be suitably waxed to aid crop selectivity, although some spotting can occur on the crop especially if rainfall has occurred just prior to application. The Harvest Interval is 42 days for vining peas.

#### Vining Peas Background

This work has been carried out by both PGRO and also by independent specialist Cathy Knott for HDC. Applied post-emergence, flumioxazin was shown to give suppression of volunteer potatoes and help prevent flower and berry formation with acceptable levels of crop damage. Good wax levels on the crop are crucial to maintaining this tolerance. Avoid applying flumioxazin if foliage is wet as this can lead to increased crop damage. Rainfall shortly after application may enhance residual activity, but may increase the level of crop damage.

**It should not be used with any partner products or adjuvants** when used in vining peas, as this could increase the contact activity and may cause severe spotting on the crop. Adequate leaf wax is essential to ensure good crop safety. Tank hygiene before use could be important in case of previous product residues. Due to the high level of activity in relation to the low use rate, always thoroughly wash out the sprayer after use. A proprietary tank cleaner is recommended.

#### CARROTS AND PARSNIPS (SOLA 1111, 1112, 1117 replaces 0953, 0956, 0959 of 2009)

The SOLA for carrots and parsnips is mainly for the control of volunteer potatoes and will be a welcome option as there are no other post-emergence options in these crops.

### **Rate and Timing**

SumiMax, Digital and Guillotine can be applied **up to a total dose of 100 ml/ha** post-emergence between BBCH 12-19 or from two true leaves up to nine true leaves. Growers need to take care about crop selectivity as there is a risk of crop spotting/damage. The harvest interval in carrots and parsnips is 28 days. Growers are advised to test crop safety on a small area of crop prior to wide scale use.

### **Carrots Background**

This work has been carried out by HDC. Applied post-emergence, flumioxazin was shown to give suppression of volunteer potatoes and help prevent flower and berry formation with acceptable levels of crop damage. Good leaf integrity and wax levels on the crop are crucial to maintaining this tolerance. Avoid applying flumioxazin if foliage is wet as this can lead to increased crop damage. Rainfall shortly after application may enhance residual activity, but may increase the level of crop damage.

**It should not be used with any partner products or adjuvant**, as this could increase the contact activity and may cause severe spotting on the crop. Adequate leaf wax is essential to ensure good crop safety. Tank hygiene before use could be important in case of previous product residues. Due to the high level of activity in relation to the low use rate, always thoroughly wash out the sprayer after use. A proprietary tank cleaner is recommended.

### **BULB ONIONS (SOLA 1108, 1114, 1116 replaces 0954, 0957, 0960 of 2009)**

The SOLA for bulb onions is post-emergence of the crop for control of volunteer potatoes and also for control of some broad leaf weeds.

### **Rate and Timing**

The rate for SumiMax, Digital and Guillotine is **up to a total dose of 100 ml/ha**. Apply from BBCH 13 to BBCH 45, or from the third leaf to 50% of bulb diameter reached before bolting or 10% leaves bent over. Harvest Interval in bulb onions is 42 days.

**It should not be used with any partner products or adjuvant**, as this could increase the contact activity and may cause severe spotting on the crop. Adequate leaf wax is essential to ensure good crop safety. Tank hygiene before use could be important in case of previous product residues. Due to the high level of activity in relation to the low use rate, always thoroughly wash out the sprayer after use. A proprietary tank cleaner is recommended.

### **Onions Background**

Selectivity relies on suitable crop leaf wax. Do not apply to the crop when leaves are wet. Irrigation or rainfall increases the residual effect but may also increase damage to the crop. Growers are advised to test crop safety on a small area of crop prior to wide scale use. In HDC trials, low doses were also examined and gave encouraging satisfactory results. No further work has been done on crop safety of flumioxazin to onion in the UK. Flumioxazin equivalent to 100ml/ha of UK product is authorised in the US for application at recommended 3 - 6 leaf stage of onion. A dose rate of 100 ml/ha (30 g a.i. /ha) is needed for effective volunteer potato control but lower doses can give useful results in stunting potato growth and can prevent flowering.

### **WEED CONTROL FOR ALL SOLA CROPS**

Flumioxazin was developed in the UK as an autumn and winter treatment for wheat. Most knowledge of weed control relates to weed species germinating at that time. From the limited UK work by HDC and PGRO, good control can be achieved in the spring of most species, although information from other countries suggests that polygonum species may not be well controlled

As is the case for all SOLA's granted by CRD, Sumitomo Chemical Company Ltd as manufacturer of SumiMax, Digital and Guillotine, and Interfarm as UK distributor, decline any liability in case of crop damage.

**For further information please ring Interfarm on 01354 741414 or email [technical@interfarm.co.uk](mailto:technical@interfarm.co.uk)  
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