

## Tyfu Cymru: Technical Advice Sheet

### Soft Fruit Notes – July

#### General Comments

The season has progressed well so far, and while some growers are looking to finish picking soon others will be going into the autumn. In some instances PYO sites have opened successfully, almost with almost unrestricted access although other growers have found new ways of selling such as honesty boxes, home deliveries and drive-through purchasing that they may wish to consider for later seasons.

#### Other Crops for the PYO Market

As you move through the summer and make plans for next year, you could start thinking about crops for next year. A number of other products fit well with the PYO model and can supplement your business in a number of ways. Sweetcorn can be planted cheaply but sold at high value particularly as it will be at much higher value than that seen in supermarkets. Cut sunflowers could be sold at three-for-£1 for basic varieties. Think about what sort of customers are visiting your site and what products are likely to be attractive to them. Other crops like gooseberry and blackcurrants can be helpful in bridging harvest periods and can be very popular even if only grown in small areas, and blackberries can be picked after raspberries finish. More products will also increase the average spend per customer as there will be greater choice for them to take home.

#### End of Season Activities

You may be considering overwintering crops for the new season, but these rarely live up to expectations whilst providing a headache for pest and disease carry over, although overwintered raspberries can be a cheaper option than replacement. Tunnel roofs can be dropped to avoid heat and variable temperatures, although you should continue to feed to prevent limited regrowth.

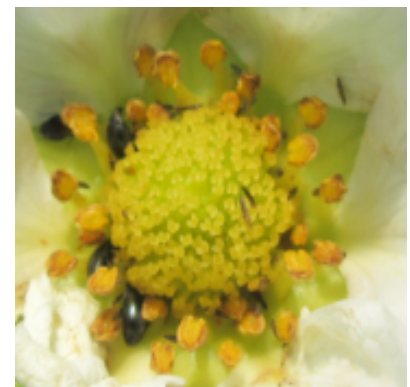
#### Diseases in Strawberry

**Powdery Mildew** will be a recurrent problem from now on, so be prepared for a weekly spray program under tunnels. Flower stems and fruit can be effected, not just larger leaves. Runners on tabletops can be at particular risk as they can be missed by the sprayers and provide ideal settings for disease development. Regularly remove runners to reduce background spore production sites. Similarly, nearly finished crops can also pose a threat and will need to continue to be sprayed. Amistar and Charm can be effective, and can be compatible with IPDM programs.



#### Strawberry Pests

July and August can be important months for watching for pest activity while keeping your biocontrols going in both 60 day and everbearer crops. While native predators will be increasing they will still lag behind pests so watch conditions carefully. **Thrips**, including **Rose Thrips** can continue to be a problem. These can migrate in large numbers (especially if disturbed by harvests in nearby fields) and can lead to bronzed green berries. Monitor for these weekly, and spray if you see 3 or more per flower (e.g. Tracer). Flipper can also be applied under EAMU (3418/19) but this needs to be used in soft water to make a clear solution when mixed (in hard water it will form a



Rose thrips and pollen beetles in a flower head

cloudy suspension). If you are in a hard water area you can use a non-acidifying water conditioner (e.g. Align from Intercrop) or collected rainwater.

*Amblyseius* can be very effective for control, but need to be applied in large amounts around 2 per plant. These can be particularly effective in everbearers as it is easier to establish populations in a longer-term crop. *Amblyseius* will only target larvae, but *Orius* can also prove effective, but need warm temperatures to establish (preventative rate of 1-2 per m<sup>2</sup>). If you do use chemical sprays for control these are best kept as a last resort as they will upset your biological control program, particularly *Orius*.



Thrips damage to fruit

**Capsids** will continue to build up through July into August. Younger adults are small and bright green, but are agile and will scoot quickly out of view or fly above the crop as you are crop walking. It is best to keep an eye out for scuffed fruit as an indicator of damage. These can be difficult to control (especially in IPDM systems) but these are unlikely to have a significant impact on the crop overall.



Capsid damage to fruit

**Whitefly** are starting to become a more frequent problem, and can be brought on site in new stock. As sucking insects these can cause leaves to turn yellow. The honeydew they produce can be a cause of black sooty mould, and can be a vector for viruses/diseases. However, these can be effectively controlled by *Encarsia* as part of your normal IPDM program.

**Vine Weevil** are becoming an increasing year-round problem with warmer winters leaving characteristic notching of the leaves as symptoms. Adults will now be laying eggs, so check around the roots of your crops for larva as eggs will hatch after 10 days at summer temperatures. Larvae can easily be controlled with nematode applications – these can either be applied as two full rate doses in July and September, or a 40% dose on a monthly basis.



Whitefly on leaf underside

**Red spider mite** can be a persistent pest, but can be easily controlled with predators. If populations are high these can be treated – a new acaricide from Certis (Scelta) can be effective.

### Weed Control in Strawberry

Problem weeds like willowherb, blowing thistle and groundsel are spreading late into the season, keep an eye for weeds in tunnels growing through mypex or in the slabs as you will have a good opportunity to manage these after you have removed leaf. You will also need to think about weed management as you de-skin tunnels moving into the autumn. Windblown weeds including docks, chickweed and perennial cresses can also spread in the autumn smother and drop seed into slabs. There are no serious chemical control options for weeds in strawberry, although some post-harvest products can be used for clean-up.



Seeding groundsel can spread seed into slabs which will germinate in the autumn and need hand weeding in the spring.



Willowherb blown into tunnels last year will now be flowering, requiring a second hand weeding this season.

Post-Harvest Herbicides for Strawberry			
Typical Brand	Active	Application rate	Comment
Shark EAMU 0633/19	Carfentrazone ethyl (60 g/l)	0.4 l/ha	Only cleared for dormant crops or preplanting. Only use up to 0.8 l/ha per year.
Dow Shield 400 EAMU 1822/13	Clopyralid (400g/l)	0.5 l/ha	EAMU applies for outdoor only. Very good on young groundsel, mayweed and creeping thistle. May impair flower initiation. Only use up to 0.75 l/ha per year. Do not use after end of August
Laser	Cycloxydim (21% w/w)	2.25 l/ha	Will not kill all grasses. Read label, needs a wetter.
Goltix 70 SC EAMU 2919/14	Metamitron (700g/l)	2.0 l/ha	EAMU applies. Good on wide range of small (<2cm) seedlings. EAMU states use September to November. Only use up to 3.0 l/ha per year.
Shrapnel	Phenmedipham (320 g/l)	3.0 l/ha	Various brands, full label, 0.9-3.0 l/ha. Total for year, 3.0 l/ha. Good mix with Shield, discuss with adviser. Hard to get supply sometimes.
Fusilade Max	Fluazifop-P-butyl (125g/l)	3.0 l/ha	Will not kill all grasses. MAPP No 18815 use up by 28 <sup>th</sup> Feb 2021. Other brands 30 <sup>th</sup> Aug 2020.
Centurion Max EAMU 3640/19	Clethodim (120 g/l)	0.8 (pre flowering) -2.0 (post harvest)	For strawberries, raspberries and bushfruit. Will kill more grasses species than Fusilade Max or Laser. KILLS BLACK GRASS most of the time
Finalsan	Fatty acid, perlagonic acid	170 l/ha (this is correct)	Maintaining the correct concentration is important for this herbicide. Most effective on young seedlings. Do not use after end of August

## Raspberry & Cane Fruit

Many cane crops are reaching the end of their production, so you can start planning for next year. Blackberries have been proving particularly popular with customers, so you may wish to consider including these as part of your planting next year. Large-fruited varieties such as Loch Ness and Obsidian easily rival hedgerow blackberries – and these can be mixed in with raspberry crops to boost customer interest in PYO crops and extend the season depending on the variety chosen.

If you are planning to overwinter canes you should aim to remove the fruited canes while thinning out to three new canes per pot. The roof can be dropped but keep feeding to support the new canes and provide physical support by tying in new canes where required. You may need to tip the canes once they have stopped growing this season to make sure they do not extend above your trellis as they may get damaged in strong autumn and winter winds

Hard rain in unprotected canes can bruise fruit, leading to Botrytis development. Strong sun can also promote fine hair growth on the berry (particularly in Octavia). In both cases only the outer facing side of the fruit will be impacted.



## Raspberry Pest & Disease

Mottled leaves, with matching dark green undersides can be signs of **raspberry leaf and bud mite**, which can also transmit viruses. These generally seems to be a problem for bare root in stock, but there is no easy solution for this.



Monitor your crops for **cane blight** in crops that do not leaf up and fruit properly and if you have had issues with cane midge earlier in the season. Similarly, symptoms of raspberry rust and spur blight might be appearing on canes.



Raspberry Rust

Spur Blight

Blackberry Downy Mildew Leaf & Fruit Damage

While not a disease issue, be vigilant for any signs of herbicide damage in your canes, especially if there is the potential for drift from neighbouring arable crops that are receiving an end of season glyphosate spray – this can be particularly challenging as glyphosate can be taken into the roots and cause problems later on or next season.

## Bush Fruits

Weed control in bush fruit is now becoming important as they can be significant sources of groundsel, thistles, willow herb and other wind-blown weeds. Removing weeds by hand or with a strimmer should be used now. Carefully directed glyphosate (e.g. Roundup Powermax - EAMU 1316/14, among others) can be used after

harvest, with Dow Shield (EAMU 1629/16) allowed up until 31<sup>st</sup> August. Pruning can be started in winter once the bushes have lost their leaves. Any dead wood should be removed from the centre of the bush to allow light in and the new wood to grow through.

### **Disclaimer**

Every effort is made to ensure the accuracy of information and recommendations given in these notes. All applications of crop protection chemicals should be made in accordance with label recommendations, which should be consulted before spraying. Some of the pesticides mentioned in these notes may not be supported by label recommendations for their use on pumpkin crops but are permissible via Extension of Authorisation for Minor Use (EAMU) in the UK under 'The Revised Long Term Arrangements For Extension Of Use (2002)'. In these cases, the use of the pesticide is at the risk of the user and Tyfu Cymru does not accept liability for any loss or damage caused by such use. The references to on-label approvals and EAMUs for use of pesticides in pumpkin crops and are correct at the time of writing. These are subject to change and approval may be withdrawn at any point. It is the grower's responsibility to check approvals before use of pesticides. If in doubt a grower should seek advice from a BASIS qualified advisor - this is available free of charge for eligible growers through the Tyfu Cymru program, please contact us to arrange an appointment – email/telephone advice is also available.