

Tyfu Cymru Soft Fruit Network Factsheet

Disease Management of Bush Fruit

Currants, gooseberries and blueberries can be an important addition to any soft fruit business, but effective pest and disease management is required to get the best out of your plants. The perennial woody nature of these crops means that overwintered pests can carry problems over from one year to the next, so you must be vigilant in the monitoring and control before these issues get out of hand. This guide summarizes the main problem areas for bush crops, but for any pest/disease control advice you should aim to consult a BASIS qualified consultant – one-to-one visits can be arranged for eligible businesses through the Tyfu Cymru program to provide you with targeted advice on soft fruit growing.

The AHDB has recently released a Bush Fruit Crop Walker's Guide which can be useful in diagnosing a wide range of pest and disease causes in bush fruit with a wide range of photographs. This can be accessed online here: <https://ahdb.org.uk/knowledge-library/bush-fruit-crop-walkers-guide>

Pruning – Effective pruning can have a significant impact on pest and disease control in bush fruit. You should look to prune in the late autumn/winter when the bushes are dormant after leaf fall, and good pruning will improve the quality of both the bush and next year's crop. When you prune you should aim to remove any low branches that are likely to touch the ground when weighted down with fruit as these fruit are likely to ripen slowly and be prone to *Botrytis*. Bushes should be narrowed to allow light into the centre, and to allow good access in alleyways (for spraying and harvesting) to prevent damage. You should focus on removing older wood, and encouraging new wood to grow. You should also aim to remove suckers during normal production to improve access for post-harvesting weeding.

Common Pests

Blackcurrant Gall Mite – Mites less than 0.25mm long which feed and reproduce within the buds, causing "Big Bud" with characteristically enlarged buds (right). Infested buds begin to swell in the summer, and mites will emerge in the spring looking for new buds to infect. Gall mites can also transmit the blackcurrant reversion virus – this triggers the bush to revert to a "wild" state with purplish-red flower buds and leaves with fewer veins and a coarser margins/texture (photo below right), and infected plants will show significantly lower yields. Once infected, the virus will spread throughout a bush so it is important to monitor and prune off any infected branches. Sulphur sprays should be timed for bud burst. AHDB have a predictive tool for when they are emerging and sprays should be times for just before emergence: <https://ahdb.org.uk/blackcurrant-gall-mite-emergence-charts>. Some varieties are very sensitive to sulphur so care needs to be taken not to apply near flowering. Batavia (EAMU 1054/19) now has approval for use post-harvest during the growing season.



Healthy

Reverted



Aphids – Bush fruit are targeted by a variety of aphid species (e.g. currant-sowthistle, gooseberry or blister aphid). You should consider a spray for aphids at the end of September which can be more effective than spring application as well as avoiding chemical residues in the fruit. Thiacloprid (Calypso; EAMU 2133/14) can be applied to blackcurrants with a history of aphid problems. There are also EAMUs for the use of fatty acids (Flipper; EAMU 3418/19) and lambda-cyhalothrin (Hallmark with Zeon Technology; EAMU 3752/06), through care should be taken to avoid flowering for some of these actives. You should carefully monitor establishing plantations where aphid damage can significantly reduce growth, checking tips regularly for infestation,

particularly in the centre of the bush. Spirotetramat (Batavia; EAMU 1054/19) can be used on currants but only post-harvest.

Caterpillars – Caterpillar infestations on bush fruit are common in spring after the onset of warmer weather. Winter moth and tortrix moth caterpillars can be found on shoot tips and flowers in blueberry, and in early buds and flowers of currants and gooseberries. You should check buds and developing foliage for small patches of frass and caterpillar silk for early signs before characteristic “shot hole” damage and larger caterpillars can be seen. Winter moth (photo right) and Tortrix moth in blackcurrant can be controlled with spinosad (Tracer; EAMU 1203/18) or chlorantraniliprole (Coragen; EAMU 1087/15) before flowering.



Sawfly – Yellow-striped caterpillars will attack currants and gooseberries leaves, particularly in the centre of bushes where detection can be difficult. Sawfly caterpillars will quickly defoliate bushes if left uncontrolled, so it is important that these are monitored in crops with a history of infestation. Sawfly can be controlled in currants and gooseberries with thiacloprid (Calypso; EAMU 2014/2133). Gooseberries are particularly susceptible to sawfly attack.

Vine Weevil – This affects blueberries in pots and establishing plantations of blackcurrants and blueberries in particular. Adults emerge in spring, feeding on leaves creating notching on the leaf margins. The larvae that hatch from eggs laid by adults feed on plant roots, which can severely weaken the bushes particularly when they are establishing. Targeting the larvae is the most effective method of control. Nematodes such as *Steinernema kraussei* or *Heterorhabditis bacteriophora* can be easily applied using drip irrigation or as a drench. Check the manufacturer’s leaflet to determine the rate required for each situation as it will change with pot size. Ensure that any filters are removed before application and that the suspension is continually agitated so it does not separate.



Two Spotted Spider Mite – Mites overwinter on organic debris or weeds, but will emerge and lay eggs on new foliage in the spring. Infestations normally begin in the middle of summer after fruit has set. Plants with weak growth as a result of excessive nitrogen application can boost mite populations, and young plants are susceptible. Mites feed on leaf sap, leading to weakening and early leaf drop, reducing fruit size and quality in the next season. Some control can be achieved in blackcurrant with Envidor (EAMU 1000/16) but avoid early season applications as these can adversely affect beneficial insect populations that can naturally suppress mite populations. These are generally only a problem in blackcurrant.



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 bush fruit 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. Growers must have read the EAMU associated with a pesticide before use and must hold an electronic or hard copy of the EAMU on record. The references to on-label approvals and EAMUs for use of pesticides on bush fruit 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 a visit to your site.