

Tyfu Cymru Soft Fruit Network Factsheet

Disease and Weed 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>

Common Diseases

Leaf Spot – Damp/wet conditions can lead to small, irregular dark brown spots on older leaves from May onwards, which lead to premature leaf fall; impacting on yield and future bud development. This can be a particular concern after harvest as damaged leaves are vulnerable to infection. Dodine e.g. Syllit 400SC is authorized for use in blackcurrant only, and boscalid/pyraclostrobin (e.g. Signum) can be used in blueberry (EAMU 2111/10) and will give some control of leaf spot, as will myclobutanil (Systhane 20EW) in currants and gooseberries. It should be noted that some cultivars of redcurrant are also susceptible to leaf spot.



Botrytis – Grey mold infection of flowers leads to rotting fruit during ripening, and blossom, young leaves and shoot tips can be killed outright. Severity can increase where there is high humidity and warm temperatures (particularly where air circulation is poor), frost-damaged flowers or where excess nitrogen application has caused soft growth. In gooseberry, branches may be infected through wounds, which can lead to wilting. You should aim to have a spray program in place from flowering through to harvest. During fruiting, Signum has approval for all currants (redcurrant and whitecurrant - EAMU 2114/10) and blueberry (EAMU 2111/10), whilst Teldor has approval for all bush fruit except whitecurrants (EAMU 2926/08) - check approvals for harvest intervals).



American Gooseberry Mildew – Infects shoots and fruit of gooseberries and currants. White patches initially develop on new leaves, shoots (photo) and on fruits; the fungal patches turn brown later in the season. The infection usually occurs during high humidity and warm temperatures. The damage to the shoots results in stunted growth which will affect yields in subsequent crops. Preventative fungicides will aid control of the disease, many of those used for leaf spot or botrytis will have some efficacy. Varieties of gooseberry and blackcurrant vary in their susceptibility to infection. Red and white currant are less susceptible. With susceptible cultivars routine applications of a protective fungicide/fungicides are generally necessary. Several actives are available for use in currants and gooseberries including myclobutanil, bupirimate (e.g. Nimrod) and kresoxim-methyl (Stroby WG). In addition potassium bicarbonate can be used to reduce levels of mildew infection but in practice is not as effective against American Gooseberry Mildew as it is strawberry powdery mildew.



Blueberry Anthracnose – This disease affects shoots and fruits of blueberry bushes and is particularly a problem during warm and humid conditions at flowering. Fruits become sunken at the blossom end as they ripen (photo). As it progresses small orange fruiting bodies may be visible. Again preventative fungicide sprays during blossom will aid in its control.



Die-back Disease – This is otherwise known sudden bush death affecting currants and gooseberries. The branches wilt, but the leaves are left on the branch during the winter and do not drop. Affected branches will not break bud in the following season. If the branches are broken open the central tissues looks diseased and brown (see far right photo for comparison of diseased and healthy tissue). This disease takes advantage of stressed and weak bushes and may enter at wound sites such as cracked branches or pruning wounds. Limited control options, but avoid bushes get stressed, damaged during spraying/harvest and cut out old and infected wood.



Weed Management – Weeds can quickly overshadow bushes (particularly during establishment) resulting in poor bush growth and can make harvest difficult. Blackcurrant cuttings can be planted through holes in Mypex or plastic to aid initial weed control. You should aim to control perennial and annual weeds both within and between the bushes, and this should be a key focus after harvests finish. Weeds in the rows between bushes should also be controlled to improve access, especially in PYO plantations. Several residual pre/post-emergence herbicides are available for use in bush fruits. Propyzamide e.g. Kerb Flo can be used during the autumn/winter and is useful for control pre/post emergence of overwinter germinating weeds such as chickweed and annual meadow grass, alongside other grass species including black grass. Pendimethalin (e.g. Stomp 400SC) can be used later during the dormant season (up to bud break) in all bush fruit crops and is usually applied with another herbicide such as isoxaben (e.g. Flexidor) to increase the weed spectrum controlled. Contact herbicides should be either applied as a spot treatment or through careful use of a hooded spray, to avoid contact with the bushes. Grass weeds can quickly take hold in young or weak plantations, severely stunting growth. These can be controlled with an overspray of fluzifop-P-butyl (e.g. Fusilade Max; some MAPP no. require EAMUs) in all bush fruit. An alternative for blackcurrant, redcurrant, blueberry and gooseberry is clethodim (Centurion Max; EAMU 3640/19). Broadleaf weeds in currants and gooseberries can be controlled with the use of a carefully directed (and ideally shielded) application of glyphosate, consult appropriate EAMUs for use as not all glyphosate containing products have approval for this use. When using glyphosate after harvest pruning of low branches can help reduce the risk it coming into contact with bushes; as significant damage can be seen in the spring from autumn or early winter applications. Carfentrazone-ethyl (Shark; EAMU 0627/19) can be used between bushes and around the bases of bush fruit crops to remove existing weeds, however this can cause scorch if it comes into contact with green leaf. Timing restrictions are in place for its use, so be sure to check the EAMU. Young thistles can be spot treated using clopyralid (Dow Shield 400; EAMU 1629/16) with a 42 day harvest interval between 1st March and 31st August, avoiding the flowering period.

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.