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Cherry growing in NSW

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DESCRIPTION

The commercial sweet cherry is considered to be a native of the Caspian–Black Sea region extending as far east as northern India. Cherries are classified under the genus *Prunus* and belong to the family *Rosaceae*. Only a few species of the subgenus *Cerasus* have edible fruit, the most important being *Prunus avium*, the sweet cherry, and *Prunus cerasus*, the sour cherry.

The leaves and fruit of the sweet cherry are larger than those of other cherry species. Leaves emerge from the buds folded lengthwise at the base of the leaf blades; on the petiole are glands which are often bright red. Flowers are white petalled and usually single, and buds contain from 1–5 flowers.

Fruit varies from round through to ovate and heart-shaped. Oval-shaped fruit have shallow stem cavities. Deep cavities and prominent shoulders characterise heart-shaped fruit. The stylar scar and suture on the fruit are often noticeable. Skin and flesh colours range from yellow to shades of red to almost black and the stone is free and semi-cling.

Cherries are an increasingly-popular fruit in the stone fruit growing areas of the State.

PLANTING AND PRODUCTION STATISTICS

The Young and Orange districts produce 70 per cent of the cherries grown in New South Wales and approximately 50 per cent of Australia's total production. Plantings are also found in the Batlow/Tumut region on the Southern Highlands; in the Cowra, Canowindra and Forbes regions; and in the Murrumbidgee Irrigation Area (MIA) and around Hillston. The MIA and Hillston districts are the earliest season followed by Cowra, Young, Orange and Batlow. The picking season can start in the third week in October and extend into January. This window of availability is important for marketing strategies as well as offering consumers a quality product for a longer period of time. Other major areas of production in Australia are Victoria, South Australia and Tasmania.

The 2001 census showed 1200 hectares planted to cherries in New South Wales, 40 per cent being non-bearing.

Cherries have been grown at Young since 1847; the first commercial orchard was planted in 1878. The 2001 census includes 700 hectares of cherries in the Young district, representing 60 per cent of the State's total planting. In recent years, seasonal variations at Young have meant the crop has varied from 500,000–800,000 cartons (2500–4000 tonnes).

Cherry growing at Orange began as a supplementary operation to pome fruit production with this changing in recent years. The district is experiencing a growth in cherry planting. Some orchardists are removing all of their pome fruit trees and replanting with cherries while others are increasing the number and variety of cherry trees on their blocks.

Cherry production at Orange, like Young, fluctuates with seasonal conditions and is greatly influenced by rainfall during the harvest period. Rain can cause extensive losses due to cracking with some early varieties particularly susceptible. Drought can have significant effects on cherry yields, size, and production times.

Cherry growing on the Tablelands is generally more difficult due to the high-incidence of bacterial canker in young plantings. This is a particularly serious problem in the colder and wetter areas of the Tablelands. A strategy of spraying programs and maintaining healthy trees is required during the early developing years to avoid tree losses.

Cherry trees grow on most soil types — except heavy clays — provided that the soil is friable and well-drained. They do not tolerate 'wet feet'. The topsoil should have good depth and be well-structured. Slightly sloping country that is well-drained in wet seasons is preferred. Conversely, gully lines and seepage areas must be avoided.

However, where the soil is suspect, it can be graded into raised beds with drainage provided down row centres. This system has been made practical by the availability of micro-irrigation systems. In general, soil drainage, depth, and permeability are more important than fertility because nutritional imbalances can be corrected by fertilisers.

Avoid soils in which tomatoes, potatoes or other solanaceous crops have been grown during the previous 10 years, as cherries are susceptible to the *Verticillium* wilt fungus. Old apple-growing areas may also need to be thoroughly cleared of left-over root material, deep-ripped and, possibly, fumigated before tree establishment to avoid *Armillaria* and other associated replant diseases.

As cherries blossom early, the fruit buds are sensitive to spring frosts just preceding and during the opening of flowers. Therefore, look carefully at local temperature data to avoid crop losses from frosts. Sloping land generally provides good air drainage. When exposed to strong winds, trees can grow lopsided meaning that the harmful effects of any dry periods will be accentuated.

Planting of windbreaks is also a good idea as bee activity is restricted by winds during blossoming. This often means that less fruit is produced on the exposed side than on the leeward side where bees can more satisfactorily carry out pollination.

Cherries are also very susceptible to wind bruising, especially when approaching maturity. Heavy losses can therefore result, particularly on early maturing soft varieties. Cherries are a perishable crop so they must be harvested, cooled and marketed quickly to avoid over-maturity and loss of quality. Because of this, it is important to have sufficient seasonal labour available to handle the crop quickly.

ROOTSTOCKS

The main rootstocks used in New South Wales are Mazzard, Mahaleb and Colt. Growers in the Young area tend to favour Mahaleb, whereas Orange orchards are usually planted to Mazzard. Both districts have also used Colt with new plantings. Rootstock trials are underway in various locations to find stocks which can aid in dwarfing, disease resistance and consistent production.

In the Young district, Mahaleb rootstocks are often planted in the field at least one year before they are grafted. This practice is an inexpensive way of establishing or replanting an orchard but, in some cases, it takes longer for the planting to become established.

Mahaleb

Mahaleb, which has been the main rootstock at Young for many years, has a deep root system that enables trees to withstand dry conditions. The lighter, free-draining soils at Young are therefore ideal for this variety. Mahaleb, however, has been unsuccessful in most other districts due to its intolerance to shallow soils and its susceptibility to *phytopthora*. The original Mahaleb was grown from seed obtained from local trees and, more recently, from virus-tested source trees. There is still some variation in the performance of these stocks. Recently, two clonal selections of Mahaleb have become available to the industry. St Lucie 64 (SL 64) and St Lucie 405 (SL 405) are proving to be significant improvements on the original Mahaleb.

Trees on Mahaleb are not as free-growing as those on Mazzard. However, they produce large trees under good growing conditions and start bearing at an early age. Trees on Mahaleb have a more spreading growth habit than those on Mazzard. Mahaleb stock has a tendency to show partial incompatibility with some cherry varieties.

Varieties to avoid with Mahaleb include Eagle Seedling, Burgsdorf, Regina and Van. Cases of incompatibility have also been reported with Rons Seedling. The resulting condition appears to dwarf trees and reduce their productive life. Mahaleb seedlings can also exhibit some variation in type. Selection of virus-tested stock is, therefore, preferable.

Mazzard

Wild sweet cherry seedlings, commonly called Mazzards, cross-pollinate readily with most sweet cherry varieties with the resultant seedlings often hybrids of an unknown quality.

Therefore, only select free-growing seedlings with a well-developed root system.

Nurseries often have difficulties in getting a good germination of Mazzard seed with some nurseries propagating this stock by using virus-tested root pieces. Mazzard seedlings typically produce large trees which are slow to reach full production but which are long-lived. All commercial cherry varieties are compatible with Mazzard with good bud unions resulting.

The East Malling clonal strain of Mazzard F12/1 has recently been planted in various districts and appears to show some resistance to bacterial canker. Trees worked high on this stock also establish better where canker is a problem.

Colt

Colt is proving a useful stock for replant situations as Colt rootstock propagates easily. Trees have similar vigour to F12/1 with wide-angled branching. Colt, though, will generally fruit earlier than F12/1 with an increase in productivity and larger fruit. Colt is not drought-tolerant. This rootstock is patented and only available from licenced nurseries.

In general, rootstocks vary in performance in different environments. It is therefore best to select a number of rootstocks that are believed to have potential for the chosen district and to compare these on-site. Rootstock trials are currently being run nationwide. These trials include a number of Geislas, dwarfing, and semi-dwarfing stocks (G5, G6 and G7), the Weiroot series (CERs), GM series (Inmil, Damil and Camil), CAB (Italy) and the MxM series from the United States which includes the rootstock Ma x Ma 14 which was originally selected in France. More information regarding rootstocks, their performances, and their traits, can be obtained by contacting NSW Agriculture's Young district office or Orange Agricultural Institute.

PROPAGATION

Because cherries do not produce uniform seedlings, vegetative propagation is necessary to produce trees that are true to type. Grafting is favoured for this, although some nurseries prefer budding. Stocks are grafted during July and early August. The timing is important because, once the stock begins to grow, the 'take' usually decreases in proportion to the stage of growth. Scion wood should only be obtained from certified virus-tested trees.

POLLINATION AND COMPATIBILITY

When selecting varieties or planting out new blocks, the issue of cross-pollination should be considered. This is because unsatisfactory cropping of many blocks has been traced back to insufficient or ineffective pollination. Varieties of sweet cherries can be either self-fertile or cross-fertile. Because of this, all cross-fertile varieties should be planted together and with an arrangement made to obtain bees for pollination.

It is also important to ensure that varieties with similar flowering times are planted together to ensure adequate cross-pollination. Where pollinators have not been planted or are insufficient in number, pollination can be achieved by grafting limbs of selected varieties onto trees throughout the block. Information is usually available from the nursery where trees are purchased regarding flowering compatibility and pollination.

VARIETIES

When deciding on varieties for planting, consider the following points:

- varieties should be true to name and free of off-types;
- they should be compatible and able to cross-pollinate one another;
- varieties should be selected to provide a continuity of fruit if a longer harvesting period is desired;
- preference should be given to firm varieties with some resistance to weather damage;
- varieties should be grown which suit the market; and
- varietal differences between districts should be considered.

There are more than 50 varieties of sweet cherries currently available. Remember though that varietal susceptibily to cracking and weather damage varies greatly.

Microsprinklers have gained popularity due to their high efficiency.

Early season varieties

Early Burlat

This variety originated in Morocco in 1936. The fruit is medium–large, rounded with red skin and flesh. It is susceptible to cracking and also requires careful handling from harvesting onwards. It blossoms mid-season and is a good quality, very-early season variety.

Burgsdorf

A seedling that was developed at Harcourt in Victoria. It is the first main commercial variety harvested each season. Burgsdorf is a dark-fleshed cherry of comparatively good size and firmness. In dry seasons, trees tend to overcrop on Mahaleb stock with lighter crops of better fruit size observed in drier years on Mazzard stock. Trees are vigorous and develop to a large size, if allowed. This variety blossoms very early, meaning that pollination of early blossom can be a problem.

Empress

A seedling of unknown parentage from Young. It is a round cherry with a dark red–mahogany skin colour and red–dark red flesh. It blossoms very early in the season and has an upright, spreading form. It can, however, show incompatibility on Mahaleb rootstock.

Lewis Seedling

An early variety, dark, and generally good-quality. Fruit is very sweet with medium-length stalks. It is thought to have originated in Victoria.

Merchant

This large, rounded fruit comes from the United Kingdom. It has dark-red skin and red flesh. It is a universal pollen donor, blossoms mid-season, and is one of the earlier varieties to mature. There are also indications that the variety possesses resistance to bacterial canker (*pseudomonas* spp.). This variety is only available in Australia from licenced nurseries.

Supreme

A seedling of unknown parentage selected by Mr C Sackett at Young. The fruit is large and red–black. Fruit size and shape tend to resemble that of the Rons Seedling variety. The flavour of the Supreme cherry is excellent, particularly for such an early maturing variety. Flesh firmness is good but this variety is known for splitting after the smallest amount of wet weather. The mortality rate of trees is also high during dry spells.

Vista

Has been planted extensively in Canada and is now the main early variety. Fruit is large, sweet, dark-skinned and firm-fleshed and trees are vigorous. Some cracking has been reported but the variety is not generally regarded as being highly-susceptible.

Mid-season varieties

Bing

Originated in Oregon in the United States in 1875. Fruit is a medium–large heart-shaped cherry with dark-red skin and red flesh. The variety blossoms mid-season and tends to be an upright, spreading tree that crops moderately. This is the main cultivar in the United States but also grows well in suitable conditions in Australia.

Rainier

Selected in Washington State in the United States in 1954 and first introduced in 1960. Developed as a cross between Bing and Van, it is a large, high-quality, white-fleshed cherry, very sweet and of a similar shape to Van. The skin is yellow, highly-blushed and attractive with the flesh moderately firm with clear juice. It has a small, relatively-free stone and thick stalks. Trees are hardy, vigorous, and of upright, spreading habit, very productive, and the tree starts cropping at an early age.

Rons Seedling

Originated about 1928 from a hand-pollinated cross by Mr SA Thornell at Young. Rons Seedling is a mid-season variety that retains its firmness and quality through all stages of harvesting and marketing and is generally regarded as the best cherry variety in New South Wales. The fruit is moderately resistant to splitting and very fleshy, slightly fibrous and juicy. It has an exceptionally good taste, and is dark red–purple colour when fully mature.

Stella

Originated in British Columbia, Canada in 1968. The fruit is large, heart-shaped and of the Lambert-type with a black skin. The flesh is black, moderately-firm and relatively coarse and the variety is fairly-susceptible to cracking.

Table 1. This is not an exhaustive list of varieties. Check with local nurseries for the best selections to suit your growing district.

Early season	Mid-season	Late season
Burgsdorf	Bing	Dame Roma
Early Burlat	Rainier	Kordia
Empress	Rons Seedling	Lambert
Lewis	Stella	Lapins
Merchant	Van	Sir Don
Supreme		Sir Tom
Vista		Sweetheart

Trees are vigorous, of upright, spreading habit, and productive.

Van

Originated in British Columbia in 1944. The fruit has raised shoulders and resembles the Supreme variety and is also sweet with a glossy, black skin. Van is reasonably-resistant to cracking. The fruit size is large and comparable to Bing — although sometimes it can overcrop which results in reduced size. It is also noted for its precocious cropping habit.

Late Season Varieties

Dame Roma

Black Douglas x Stella. This variety has recently been released from the South Australian Research and Development Institute and is currently being trialed in all cherry-growing districts. The variety is available from licensed nurseries.

Kordia (Attika)

This variety came from the Czech Republic and features medium–large heart-shaped fruit with a dark-red skin and a red flesh. It blossoms late in the season and matures mid–late season.

Lambert

Originated in Oregon in the United States and is a Napoleon x Black Heart cross. It produces a large, heart-shaped fruit with dark-red flesh, red–dark red skin and is susceptible to cracking.

Lapins

Originated at Summerland in Canada, from a Van x Stella cross. The fruit is large, round–heart shaped, with dark red–mahogany skin. It has good flavour with red flesh that is firm and juicy. It blossoms early in the season and is self-fertile. It is relatively split-resistant and bears good crops, with the fruit tending to bear on young wood.

Sir Don

A Black Douglas x Stella cross, this variety has recently been released by the South Australian Research and Development Institute and is currently being trialed in all cherry-growing districts. It is only available from licensed nurseries.

Sir Tom

A Black Douglas x Stella cross, this variety has recently been released by the South Australian Research and Development Institute and is currently being trialed in all cherry-growing districts. This variety is only available from licensed nurseries.

Sweetheart

This Van cross originated at Summerland in Canada. Fruit size is medium–large with a round shape, firm, but susceptible to cracking.

The skin is red–mahogany with red flesh. This variety blossoms early and is self-fertile. The tree is upright to spreading, can be precocious, and can also over-crop. This late-season cherry is gaining market acceptance and is only available in Australia through licensed nurseries.

TREE ESTABLISHMENT

In establishing trees, great emphasis is placed on the importance of thorough soil preparation in cherry production, especially the deep-ripping of tree rows. Ripping breaks up the soil and also improves water infiltration, soil drainage, and root penetration.

A soil survey is strongly-recommended prior to soil preparation. This survey involves a soil pit dug to determine soil type, structure, and uniformity, throughout the orchard. It also involves soil nutrient analysis so that the grower knows what fertilisers need to be applied to develop the right balance for future planting.

High-density plantings have recently become popular with tree-training systems allowing for tree heights of no greater than four metres. Breeders are currently reviewing several dwarfing rootstocks that will be made available, if successful, after field evaluations. This is likely to continue the trend for high-density plantings.

For a range of good reasons, (air movement, drainage, only available land), cherry blocks are often planted on sloping land which can be prone to erosion. To prevent this potential loss of topsoil, plantings on undulating country should be established across the slope with a mown strip left between the rows and weed control along the tree rows.

For these high-density systems to produce good yields early, it is essential that trees establish well. Water and nutrition are essential at this early stage. Irrigation should be scheduled according to a plan that takes into consideration: tree age; soil type and water holding capacity; evaporation; time of year; active root zone depth; and rainfall.

To schedule waterings, growers need to have some knowledge of their soil, irrigation capacity and soil moisture capacity. For assistance in this area, contact your District Horticulturist or NSW Agriculture's Irrigation Officer.

Weed control is critical for any tree crop to be productive. This assists in the retention of moisture and nutrients for the crop. There are several chemicals that can be applied to control weeds around cherry trees. (NOTE: Before applying any chemical, it is strongly-recommended that the butt of the trees be shielded.) Shields usually consist of cardboard or insulation tied around the base of the tree. Apart from protecting the plant from harmful chemicals, it also prevents suckering from

rootstocks, chewing from hares and rabbits and, in extreme cases, sunscald.

TREE PLANTING AND PRUNING

The move towards high-density plantings has meant there are several growing systems now in place. These systems include: bush systems such as Spanish and Aussie; central leader; and tie-down systems such as Lenswood, Tatura and Open Tatura.

The qualities of each system must be weighed up before planting. For example, the central leader and tie-down systems are initially more work but, are generally, 1.5–2 years earlier yielding than the bush systems. Growers should talk with other orchardists about the systems used within their district to get a better idea of what options may be best for them.

In general, these systems offer the advantage of higher early-production in the life of the tree as well as limiting the need for ladders to access fruit at harvest. This advantage generally makes harvest-time more efficient because less time is spent per tree. It also addresses occupational health and safety issues such as injuries from ladders and falls. Further information on managing high-density systems is available from your District Horticulturist.

The main pruning systems used in orchards are vase, central leader, and tie-down. All have slight variations which are grower and district-specific. It is important to pick a training system which suits your district and persevere with it. This is because there can be lost production if your system is changed after a couple of years.

After planting, cherry trees should be headed-back in the style similar to that used for other deciduous fruit trees. First, select leaders that will give sufficient spacing and balance to the tree. It is then up to the grower to both encourage lateral growth and contain the vigour in the plant. Lateral growth can be encouraged through chemicals such as Cytolin or by cultural methods such as pruning or scoring. To encourage lateral growth of the tree system, wedges may also be used. These wedges can be toothpicks, skewers, timber pickets and stakes.

Avoid winter pruning because the trees will be more susceptible to bacterial canker infection. Pruning should therefore be limited to summer in areas where bacterial canker is a problem. Pruning in late summer also means that the regrowth is less vigorous as most of the energy is spent at flowering, in leaf development, and in fruit production. Heading the tree will also result in a number of upright shoots developing just below the whorl. Limit the number of limbs to about 10, choosing those that are fairly upright and sturdy.

Summer pruning of young trees also helps to shape and develop the trees' framework and also encourages earlier cropping. Any leaders that are growing too fast can also be checked at this stage by pinching the terminal bud. Pinching-back should be confined to the young, tender part of the shoot. Remember to remove strong shoots growing in unsuitable directions.

Summer pruning is also recommended for trees that have started cropping. Pruning may be carried out before or immediately after harvest and should be restricted to reducing the number of laterals and light limbs, especially those in the centre of the tree. If leaders are growing too vigorously, growers should look at modifying their fertiliser program, in particular, the quantities of nitrogen applications. Another way of slowing vigour is to limit irrigation.

This should not be done during fruit development but instead, after harvest.

Contact your District Horticulturist for details on limiting vigour of cherry trees.

Cherry trees have traditionally been allowed to grow tall. This, however, tends to elevate the bearing area with a subsequent loss in much of the lower fruiting wood. By reducing tree height, spraying and harvesting are made easier and cropping is more even. The central leader system allows the leader complete dominance which influences the vigour of lower branches and shoots. The leader can grow several metres before pruning is required. The main production area will be in the lower branches of the tree which are well-established and at a wide angle to the main trunk.

Shortening laterals and thinning out spurs is not usually carried out annually on cherries. When shortening laterals however, make the cut through the annual growth ring. If the lateral is unwanted, cut it out. Many cherry varieties have a habit of

Wood wedges are used here to keep the branches lateral, note the leader has been allowed to take off, calming the rest of the tree.

throwing out a whorl of strong shoots just above the annual growth ring. These shoots need to be thinned out during the growing season.

Pruning decreases yields proportionally to the amount of wood removed. However, the reduction in yield is compensated for by larger fruit size and increased tree vigour. Experience indicates that light pruning carried out regularly is preferable to severe pruning periodically. Currently, pruning techniques and theories are being challenged by several orchards resulting in many methods and techniques designed to suit each situation.

SOIL MANAGEMENT

Cultivation

This practice should only be used in non-irrigated orchards or as part of dryland farming. Soil is cultivated to control weed growth which thereby reduces the competition with trees for moisture and nutrients. In addition, cultivation also improves water infiltration rates and the release of nutrients. Avoid deep cultivation which can damage the trees' feeder roots.

Cultivate orchards only when strictly necessary because too much cultivation can damage soil structure. Depending on the soil type though, deep-ripping prior to planting may be advised as it can break-up the soil and also assist infiltration and aeration.

Sod Culture

This method is the preferable form of soil management; where irrigation is available. This is because sod culture provides the best protection against soil erosion by reducing the speed of run-off water, thereby allowing greater absorption of moisture into the root system. No cultivation means that the root system is not disturbed with feeder roots developing in the topsoil, the area of greatest nutrient availability. Physical properties of the soil, especially structure, are also greatly improved under a non-cultivation system.

Another advantage of this system is that, after rain, machinery can move into sod-cultured orchards earlier than into cultivated blocks.

With sod culture, moisture and nutrients must be provided over and above the requirements of the tree. If these needs are not met, tree productivity will suffer. A compromise involves a combination of sod culture and strip herbicide or cultivation along the tree rows which, for many situations, is often the best system. To keep sod culture under control, it must be maintained by slashing or mowing. In Integrated Pest and Disease Management (IPDM) situations, rows are alternately slashed. This allows an environment for pest and predator species to remain in balance.

Weed Control

Many herbicides can damage trees. Although residual herbicides are most effective in controlling weeds, they are also most likely to damage trees and leaves. Good results have been obtained using knockdown sprays in the winter and spring when weeds are actively-growing. Follow-up sprays are required throughout the season to control new growth. Shield the butts of young trees during spraying and avoid drift onto foliage. Herbicides give the best results if applied under calm, overcast conditions or late in the evening. It is important to skirt the lower branches of trees to above 60 cm so that they do not have any contact with recently sprayed weeds as many herbicides are translocated via green growth. Another option may be to use a Controlled Droplet Application (CDA) system which is covered by a dome to prevent drift.

NUTRITION

Annual soil and leaf analyses should be carried out to understand the status of the tree and its requirements.

Samples for testing are normally taken at least two weeks prior to harvest. Nutritient imbalances can then be corrected by applying fertilisers. Fertiliser recommendations should be regarded as a guide only, because of different soil type and soil management practises.

Fertilising should, therefore, be based on regular observations of tree growth, production and fruit quality standards. As an example, a mature orchard producing 10 tonnes/hectare of cherries will be utilising 100kg N, 50kg K and 30kg P. These elements need to be replaced or made available to the tree for the next season's crop.

Insulation tree guards to protect the cherry tree from herbicide, suckering and hares.

Cherry trees grow vigorously. Experience shows that, by limiting the supply of available nitrogen to the tree, unwanted excess vigour can be controlled while still having enough N to produce quality fruit. The amount of N to apply will depend on factors such as: what N is already available, the soil type, tree age and the time of year. Nitrogen applications should be split between flowering, fruit set and post-harvest so that the new buds for next season have resources to draw on. Too much available nitrogen at fruit filling and harvest stage can promote unwanted vigour, and have detrimental effects on fruit quality. These effects can include: reduced shelf life, late harvest, softer fruit and increased susceptibility to physiological disorders.

Care should be taken not to apply nitrogen to cherries during dry autumn–spring conditions, as uptake of the nutrient will be minimal.

Applications of phosphorus and potassium are recommended in the autumn in split applications, depending on availability of the nutrients from the soil. Nutrients can be applied in the soil, through drip irrigation (fertigation) or as a foliar spray.

In the past, the importance of micronutrients was not fully understood. It is now believed that these elements are as crucial to the development of cherries as are the macronutrients. Boron and zinc improve the vascular circulation and give the fruit better firmness. Calcium assists in the prevention of fruit breakdown. For more information on fertiliser applications, contact your District Horticulturist.

PESTS AND DISEASES

A number of pests and diseases attack cherries. The most serious disease is bacterial canker (*Pseudomonas syringae)*. Other diseases include brown rot and shot hole. Virus diseases are also of considerable significance. Insect pests include the cherry slug, cherry aphid, thrips and San José scale.

Details of spray treatments for pests and disease control are outlined in NSW Agriculture's *Orchard Plant Protection Guide*. Agfacts dealing with specific pests and diseases are also available from NSW Agriculture offices or on the Department website: www.agric.nsw.gov.au.

Because cherries are the first fruit to ripen in the spring, bird damage often occurs in early-maturing varieties. Cherries grown in isolated situations are more likely to be damaged. Flying foxes can also be a problem in some areas. Currently, bird netting is the best form of control providing total exclusion for the cherry crop.

Other controls for birds include a combination of scare guns, plastic or aluminium strips hung in the trees, plastic hawks and various other visual deterrents. Recent developments in bird and flying fox control include the use of permanent enclosures of synthetic nets. Growers contemplating high-density plantings should seriously consider enclosing plantings to possibly incorporate hail or rain protective nets.

Rain Protection

A problem with cherry production is splitting due to rain. The installation of rain covers can help to overcome this risk. Costs, though, must be weighed against the benefits.

HARVESTING, GRADING, PACKING AND MARKETING

It is important to harvest cherries properly so that the final product reaches the consumer in the best possible condition. It cannot be emphasised enough the importance of post-harvest handling and maintaining the cool chain from the field to the consumer.

Fruit is normally hand-picked into lugs and transported to a hydro-cooler or cool room as soon as possible to remove the field heat from the fruit. Reducing the fruit temperature increases the storage life of the product. Fruit is normally cooled prior to grading. Generally, the fruit passes over cutters which separate multiple fruits. The fruit is then sorted by size. This can be done in a number of ways, depending on the operation. After grading, fruit is packed into cartons. The standard size is a 5 kg box, but cherries are also packed into 1 kg and 2 kg boxes, depending on the intended market. Clam shell punnets and pre-weighed bags are also used. Producing fruit requires constant monitoring of market and consumer needs and it is important that a grower can produce the fruit to meet these demands.

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