Factsheet 12/10

Strawberry

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Extending the UK strawberry season using a range of plant types and growing systems

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UK strawberry growers are now able to extend the strawberry production season from the traditional 2–3 months to more than ten months, offering suppliers with British fruit virtually all year round. This factsheet describes the different techniques employed, the types of planting material that can be used and the various systems that are available for successful planting and crop establishment.

Introduction

Farmers and growers in the UK have been growing strawberries for several centuries and until the latter part of the 20th Century, commercial production had been confined to a traditional single harvest season in June and July. As strawberries have always been the most popular summer picked fruit, in the 1970s and 1980s many growers recognised the benefits of extending production into May and August.

More recently, however, new growing techniques, coupled with strong demand from large multiple retailers has encouraged UK growers to extend the season even further.

The cropping season

In the UK, strawberries can crop from March through to December. The earliest crops are generally harvested under glass in southern England in early April although additional heat and night-break lighting can bring crops into fruit as early as March. The season continues under closed fixed polythene tunnels, followed by field-grown crops under French and Spanish tunnels (Figure 1), lay-flat fleece or polythene film. The traditionally grown, unprotected field crops then become available in June and July.

1 Preparing for season extension under Spanish tunnels

Extending the season beyond June/July can be achieved by employing a number of growing systems:

- Using deep straw or white on black polythene to delay the established traditional crop.
- Growing plants that have been cold-stored and which are planted and established on specific dates so that cropping is programmed to begin after the main picking season.
- Growing everbearer varieties both outdoor and under portable tunnels to extend production through the late summer into the autumn.
- Harvesting fruit from crops grown under fixed closed tunnels and glass. Fruit picking can continue under glass until December in Southern England.

Table 1 illustrates how the cropping season can be spread from March until December using different growing systems.

Table 1 Season extension using a range of production systems

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Glass/Fixed Polythene Tunnels												
Field Portable Tunnels												
Tabletop Portable Tunnels												
Field Film/Fleece Crops												
Field Uncovered Crops												
Field Delayed Crops												
Field and Tabletop 60-Day Crops												
Field Everbearers												
Tunnel Everbearers												

Planting material

A range of planting material can be purchased from strawberry plant raisers. To understand how this material can be used, it is important to understand that strawberry varieties fall, more of less, into two physiological categories.

- Short-day varieties
- Day-neutral varieties

While it is easier to refer to varieties as 'short day' or 'day-neutral' there are varieties that respond to day length and temperature in ways that do not fit precisely into these clear categories. The behaviour of such varieties will be of increasing value especially for growers seeking to extend the day-neutral or 'everbearer' season.

Short-day varieties

Varieties that are part of the traditional main season are all short-day varieties. These are plants that initiate flowers in response to shortening day length, which in the UK occurs from late July onwards. As they crop in the main season, they are often termed 'mainseason' or 'Junebearer' varieties in the UK.

Most of these varieties initiate flowers in August and September and carry flower initials over the winter. Flower trusses then develop during the spring, producing fruit in the spring and summer months.

The cropping season of these varieties can be manipulated through cold-storing the plants after they have initiated flowers.

If plants are lifted from the soil or propagation substrate during the dormant period, they can be held in cold store at -1.6°C for several months before being planted out again. When planted out during the growing season they will grow and develop flowers and fruit, with picking starting on average some 60 days after planting.

This enables growers to plant on specific dates to programme the crop to start harvest at a required period approximately 60 days later. This technique has become known as 60-day cropping. Some varieties respond well to this system of cropping and produce high yields (eg Elsanta and Sonata), whilst others respond poorly and are best established in different ways.

Day-neutral varieties

Day-neutral varieties initiate flowers at any time of the season, irrespective of day length, and are often termed as 'everbearers' in the UK. These varieties are particularly useful as they can be manipulated to produce flowers and fruit when growers choose, usually at those times of the year when short-day or mainseason varieties are not cropping.

Different types of planting material

A range of plant material is available to growers, which can be used in different ways to crop at certain times of the season:

- Fresh dug plants
- Graded plants
- Graded cold-stored plants
- Waiting bed plants
- Crown plants
- Tray plants
- Misted tip plants
- Potted everbearers

Fresh dug plants

Fresh dug plants of mainseason varieties are used less today, but they are still used for everbearer varieties that are planted in autumn or spring (Figure 2).

They are plants that have been raised in the field and are lifted either between August and November or from February until April. Traditionally they were used by mainseason strawberry growers before crop manipulation and spread of season became important.

Everbearer varieties are planted straight into field soils for a first-year crop. With mainseason varieties, the diameter of plant crowns and flower numbers tends to vary, so many growers traditionally removed the blossom in the first year in order to grow a larger plant, taking a first crop in the second growing year.

Graded plants

Varieties such as Elsanta and Sonata can produce plants of variable crown size (Figure 3) and when supplied by propagators, are graded by the diameter of the plant's crown. In general, the larger the crown diameter, the more flowers are produced and hence the heavier the potential yield. Conversely, the smaller the crown diameter, the fewer flowers produced and the more variable the performance of the plant.

Grading and pre-selecting plants allows growers to choose stock with a crown size appropriate to their requirements.

When procuring plants, it is important to choose crowns of similar size to ensure that plants establish evenly. This also improves the accuracy of yield prediction.

Most plant suppliers grade plants into three size categories. These may vary from supplier to supplier and from year to year, depending on the weather. However, plants tend to be classified as:

- A+ Plants (crown diameter of 15 mm or more)
- Premium Grade (crown diameter of between 12–15 mm)
- Small Grade (crown diameter of 12 mm or less)

2 Fresh dug Bolero plants ready for planting

3 Fresh dug Elsanta plants showing variation in crown size

Graded cold-stored plants
Graded cold-stored plants are produced in field soils, lifted when dormant, graded according to crown size and held in cold storage at -1.6°C until they are required by growers for planting.

The larger crown sizes tend to have greater starch reserves and can be stored for longer allowing them to be planted later for later cropping. This makes them ideal for use in 60-day cropping programmes with varieties such as Elsanta and Sonata. However older plants do not store as well as younger ones and this must be taken into account when organising planting strategies.

Some mainseason varieties produce larger crown sizes than others. Elsanta and Sonata can produce a crown of 24 mm in diameter and so have a high yield potential in a 60-day crop. Other varieties, however, have smaller crowns and are less well suited to this type of production.

Waiting bed plants
Waiting bed plants are bare root plants that have been grown on to produce crowns with a diameter of more than 18 mm (Figure 4). Elsanta and Sonata have the ability to produce large crowns and are well suited to this type of production. The current type of waiting bed plants used are known as true waiting bed plants:

True waiting bed plants
True waiting bed plants are produced by growing fresh dug plants (that have been lifted by early August), in a waiting bed where they have their runners removed and are fed and watered. By the end of the growing season, plant size has increased considerably. Plants are finally lifted when dormant and held in cold storage until required. The plants are graded by size eg. Medium (18–22 mm) and Heavy (22+ mm) but propagators will normally expect to discuss more precise plant size and truss number requirements with their customers prior to purchase.

Crown plants
Crown plants are bare root mother plants harvested from propagation fields in the dormant season (Figure 5). They have large crowns with the potential to produce a high yield but, because of their age, they do not store well and need to be planted and established in winter or early spring. They can be used for 60-day cropping but are best suited for production in late June and July. However, they need very careful management if they are to perform well.

Tray plants
Tray plants are propagated in trays rather than in field soils. Runners produced from mother plants are rooted into modular trays (often under glass or polythene) and grown on.

4 Waiting bed plants with a diameter of greater than 18 mm displaying sub-crowns

5 Crown plants – note the characteristic root volume

They are removed from their trays in the dormant season and held in cold storage until sale (Figure 6).

Their well-developed roots enables them to become more evenly established than bare rooted plants whilst also allowing them to be stored over longer periods.

They are very useful for 60-day cropping in both spring for early production or autumn for late production. They are particularly suited to glasshouses as they produce fruit of high quality, cope better with long term cold storage (December-July) and likely high temperatures experienced after planting under glass in July-August.

Some recently introduced everbearer varieties that show eating quality comparable with popular short day varieties may be propagated to provide tray plant material in order to provide significant quantities of fruit in May-June.

Misted tip plants
Misted tip plants are also produced in peat modules or pots (Figure 7). Mainseason varieties are sometimes produced in this way.

Runner tips are harvested from mother plants in early July and rooted in a module or pot using overhead misting to produce a well rooted plant that is available for planting from mid-July onwards.

The establishment of such plants in mid-summer (typically after July but before mid August) in their final rooting position allows them to develop a large plant with a high-yield potential for cropping the following year.

Although they do not produce an instant yield like a 60-day plant, if established by the end of July, misted tip plants often produce higher yields in the first main cropping season than equivalent crops established from waiting bed or tray plants. The fruit is often earlier and better presented too.

Such a system is an ideal choice for varieties that are less capable than Elsanta or Sonata of producing large crowned plants for 60-day cropping.

There is also increasing interest in producing everbearer varieties using this technique. The runner tips would be harvested in late summer to produce an autumn rooted plant for spring planting.

Potted Everbearers
Potted everbearers are produced by lifting bare root everbearer plants from propagation beds in late autumn or winter, potting them into modular trays or pots then growing them on under glass or polythene. This technique produces a larger plant with more developed roots that, if managed well, can establish more quickly and offer an earlier start and a higher yield potential than everbearer plantations established conventionally using fresh dug or cold-stored plants. It has therefore become popular among many growers who prefer to establish everbearer plantations in the spring.

6 Tray plants removed from their trays and ready for planting

7 Misted tip Florence plants ready for planting

Planting and Establishment

To ensure successful cropping it is essential that strawberry plantations are planted and established correctly. Failure to do so will lead to poor plant growth, disease and reduced yield, not only in the year of planting, but for the lifetime of the plantation. The success of planting and establishment is dependent on the plants arriving at the field in good condition. It is also influenced by:

- The condition and properties of the planting medium (soil/substrate).
- The manner in which the plant is inserted into the soil/substrate.
- The quality of crop management immediately after planting.

Planting Medium

The ideal conditions and properties of the soil/substrate required for strawberry production is a huge subject in itself and too large to do justice to it here. For now, it is sufficient to state that poor soil preparation or incorrect physical properties of the peat and other substrates used as a planting medium will lead to poor root growth and ultimately unsatisfactory yields.

Planting

In all cases, either bare root or modular/potted plants are planted. The quality and health of the chosen material must be satisfactory before planting and the soil or substrate should always be moist (but not too wet) when planting. Growers should follow these guidelines:

- Aim to insert plants so that there is maximum contact between soil/substrate particles and the full length of bare roots or modular compost.
- With bare root plants, do not allow the roots to wrap or fold back on themselves.
- Several planting tools have been developed by strawberry growers to insert plants in soils and other substrates.
- For bare root plants, T-bars, planting tubes or narrow trowels are used (Figure 8).
- All should work to the principle of inserting the plant to the exact depth. The plant is generally held in place by hand while the planting tool is removed (Figure 9). The soil/substrate is then firmed around the crown of the plant.

8 T-bars, planting tubes or narrow trowels are commonly used for planting bare root plants

9 Plant being inserted into the soil

- For pot or modular plants, traditional trowels are generally employed in the soil (Diagram 1), while hands are required for bag/substrate crops.
- Planting depth is critical and a bare root plant should be inserted so that the crown tissue is flush with the soil or substrate, not proud of it.
- A modular plant should be inserted so that the top of the module or pot is just covered, but the top of the plant crown should remain uncovered.
- Planting depth is critical in all instances and the crown should never be covered.

Post-planting management

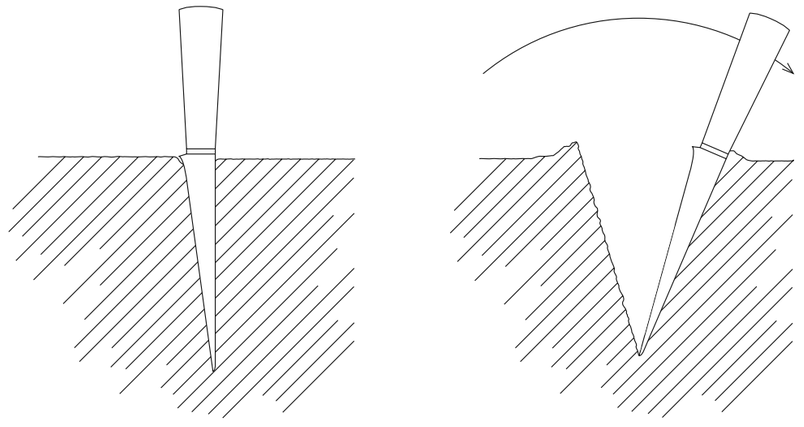
Management after planting should ensure that the plant suffers no stress, with new roots being allowed to develop rapidly. The exact form of management will depend on the system employed and the time of year. However, the two crucial factors are:

- Soil/substrate moisture content
- Leaf environment/air temperature

To ensure optimal conditions are available for plants to become established, it is important to consider the following:

- In all cases adequate soil/substrate moisture is present at all times. Ideally the root environment should remain constant and the growing medium should not be allowed to become either too wet or too dry.
- A constant environment around the leaf canopy is maintained and water evaporation and transpiration is kept to a minimum.
- Plants that become established in the autumn and winter lose less water through leaf transpiration than those planted in spring and summer, when temperatures are higher. Past research into establishing 60-day plants in the summer demonstrated a relationship between average temperature during establishment and subsequent yield, whereby yield decreases with increasing temperature.
- Misting systems should be considered to ensure a film of moisture remains on the leaf surface of spring and summer plantations. This will help to lower leaf temperature and reduce evaporation and transpiration.
- Where overhead misting has been used until first flower on 60-day plantations the number of flowers per plant will increase. Where weather conditions are warm and dry, misting can also reduce the number of misshapen fruits that form.
- Misting systems are usually an integral part of commercial glasshouses and fixed polythene tunnels. However, temporary solid-set misting systems need to be used for field-grown crops. HDC funded research (SF 57) demonstrated that sprinklers should be used until first open flower. Later applications, during the flowering period, could contribute to fruit malformation.
- It is understood that daily overhead spot watering to aid establishment is less effective than misting. However at least one round of drenching will help to settle loose soil around the roots, making for improved soil/root contact.

Diagram 1 Correct use of a trowel for planting potted plants or modules



Use the trowel correctly - Avoid air pockets and smearing by training the planters to use the trowel correctly. Insert the trowel into the soil and pull once towards the planter. Do not push the trowel back and forth as this will create the air pockets and can cause smearing of the soil.

Production systems

A range of different production systems enables UK growers to spread the cropping season (see Table 1). These systems include:

- Glass or fixed polythene tunnels
- Portable tunnels for field-grown crops
- Portable tunnels for tabletops
- Film or fleece advancement of field-grown crops
- Outdoor, unprotected field production
- Outdoor, delayed field production
- Outdoor, 60-day field and tabletop production
- Outdoor and protected everbearer field production
- Portable tunnels for tabletop everbearers

Table 2 compares the planting date for each of these systems and how these translate into cropping period.

Glass or fixed polythene tunnels

Production systems carried out under glass or fixed polythene almost exclusively employ soil-less substrates. Most UK growers use bags or pots of peat (Figure 10) and/or coir but other substrates, such as rockwool and composted bark mixes, are also used.

These systems typically produce two crops from one planting of a mainseason variety. Planting and establishment occurs from late July until mid-August, with the first crop being picked some 60 days later. The plants are retained over winter for cropping again in spring (April-May). The exact timing of harvest in spring depends on whether additional heat and/or night-break lighting has been used.

Where 60-day plants are used later in the season and grown under glass, fruit can be picked through until December. Less frequently waiting bed plants are planted during the dormant season for an early spring crop. These plants will have been allowed to accumulate sufficient chilling and will grow away quickly for an early high quality crop without the need for night break lighting.

10 Crop grown in pots of peat under glass

Table 2 Comparison of planting dates (yellow) for each system and the subsequent cropping pattern (red)

	Previous Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Glass/Fixed Polythene																									
Field Portable Tunnels																									
Tabletop Portable Tunnels																									
Field Film/Fleece Crops																									
Field Uncovered Crops																									
Field Delayed Crops																									
Field & Tabletop 60-Day Crops																									
Field Everbearers																									
Tunnel Everbearers																									

Portable tunnels for field-grown crops

Plantations are established in the field either in the soil (commonly through polythene mulched raised beds) or in bags that are laid on polythene mulched beds/strips. These are covered with a range of portable polythene tunnel structures to advance cropping from June-July into the earlier May-June period. In the early years of tunnel production, the structures were used in plantations that had been established the previous year and where high yields were expected. With the increasing requirement by retail customers to cover all crops, two year old and low yielding plantations are also now covered, but the structures are often not clad until immediately before harvest and are often referred to as 'rain cover' crops.

For early production, tunnels are erected in the winter and clad as early as January. The increased temperatures in the crop environment lead to an increased rate of development and, ultimately, onset of an earlier harvest.

The type of tunnel chosen affects the earliness of the crop. French-style tunnels were commonly used in the 1980's and 1990's. Tunnel hoops are inserted in the soil to allow the polythene to be drawn down to the ground (Figure 11). These tend to warm up very quickly giving rise to a significant advance in harvest.

In recent years, the UK industry has progressed to Spanish-style tunnels, which are multi-bay structures that are erected on a leg support system, raising the tunnels off the ground. This creates a larger air space above the plants, and a better growing and operating environment. However, the greater air mass takes longer to warm up in spring. Recent technological advances in Spanish tunnels have overcome this to ensure that cropping can be advanced to the same extent and earlier than French tunnels.

'Telescopic' tunnels (Figure 12) have combined the benefits of both 'French' and 'Spanish' styles. Based on the Spanish design, the hoops can be racked up or down on the leg supports. The hoops are racked down during the spring to provide a lift in temperatures (like the French tunnel), then racked up in late spring and summer as outdoor temperatures rise.

11 French style tunnel drawn to the ground

12 Telescopic tunnel

New types of tunnel doors and sides have also been developed to improve tunnel sealing and eliminate drafts early in the season (Figures 13 and 14).

For maximum earliness 'tunnel sealing' is now recognised as a priority. While venting may be important during sunny weather, especially in April, at all other times it is important to retain as much heat as possible. Fully closed doors and polythene sides that are buried in or make close and uniform contact with the ground are essential.

To provide an additional advance in the cropping season, plants grown in either type of portable tunnel can be covered by a lay-flat polythene or fleece sheet until the first flowers begin to open. Such covers are laid on top of the plants either before or at the same time as the tunnels are clad with polythene. This system, which raises the temperature around the plant leaf even higher, can give a further seven days advance over a structure that does not use additional insulation.

Well 'sealed' structures typically start to crop around 14 days earlier than unprotected crops, depending upon the weather and other treatments such as fleece, described later.

The earliest tunnel grown crops are harvested from fields that combine most or all of the following criteria:

- Early micro-climate (South facing, sheltered etc)
- Maiden plants planted out after a period of cold storage
- Black polythene covered raised beds
- Strong, well sealed tunnels that can be clad (or 'skinned') during the winter months

• Light soil texture

Cladding dates are of critical importance. Cladding before the end of January is advisable but, in addition to a very strong tunnel, such an early date also requires the presence of appropriate staff and management vigilance outside the normal season. The risk of gales peaks in the middle of winter but continues at a high level into March.

For temporary, field scale tunnels the following specifications may be considered to facilitate relatively safe winter cladding:

- Stronger steel (2.0–2.5 mm wall thickness, 40 mm diameter and 'extra strong' grade)
- 'Windy End Kits' or other appropriately strengthened tunnel ends (eg Haygrove SMART ends)
- Closer leg spacings
- Reduced or zero leg height
- Buried sides
- Extra roping

13 Simple doors on Spanish tunnels

14 Streamline or Nordic doors on Spanish tunnels

Although the weeks between Christmas and March provide little if any growing heat for outdoor crops, there are significant periods of open, sunny weather. During these periods, the precise timing of which is unpredictable, tunnelled crops can gain several days of valuable earliness.

Portable tunnels for tabletops

Tabletop production is a system emanating from the Netherlands and Belgium, where large volumes of fruit are picked from elevated crops grown under polythene or glass (Figure 15). As strawberry pickers find the picking height appealing, the growers in these countries elected to extend this system of production to field sites.

An increasing number of UK growers have been attracted to this system and a range of supporting or tabletop structures are now employed. In all cases, the systems use soil-less substrates, usually peat and/or coir.

The planting system employed by most growers is similar to that used in glasshouse and fixed tunnel crops. Sixty-day crops are picked in late summer and the plantation is kept over winter for cropping under tunnels in early summer. With tabletop systems, high sided tunnel designs are preferred as these offer greater clearance over the table and easier access to tractor mounted sprayers.

Unfortunately crops raised above the soil surface start picking 7–10 days later than those grown in the soil under similar covers. However by combining naturally early sites with additional investments in strength and heat retention (sealing), which are justified for semi-permanent installations, un-heated table top production can still provide very early fruit.

The use of film or fleece to advance field-grown crops

In February or early March a traditional field soil plantation is covered with large sheets of perforated polythene film (Figure 16) or woven fleece, which is weighted to avoid lifting in the wind.

Early covering increases the temperatures around the plant, advancing growth and development. In some plantations in certain seasons temperatures rise so rapidly that crop development can be more advanced than in tunnel crops.

15 Tabletop production allows fruit to be picked at a convenient height for the harvesters

16 Crop covered with perforated polythene film

However, to ensure that full pollination takes place it is best to remove the covers before 5% of flowers open, thereby slowing subsequent development. Lay-flat film or fleece advances cropping by an average of seven days in comparison to unprotected crops.

Outdoor, unprotected field production – for cropping mid season

To ensure production throughout an entire season, it is still necessary for growers to produce strawberries in the traditional UK season (June-July). Given the increasing demands by supermarket retailers for high quality produce, most supermarket growers now cover those crops scheduled for June/July cropping. However, the tunnels are not clad until immediately prior to harvest to ensure that the fruit is picked in the traditional period.

Outdoor delayed field production

The delayed field crop system is used to hold back the cropping period of soil-grown mainseason varieties that would usually crop in June and early July. The exact cropping season will depend on the weather and variety being delayed.

In general it is prudent to use a strong field of either mid- or late-season varieties to accentuate their delay in production. The delay in cropping can vary between 7 and 14 days, depending on the exact timing of operations.

Two methods are used to delay cropping. Both rely on the same principle; that is the exclusion of light from the onset of spring growth:

- Deep straw
- White on black polythene

Both of these techniques tend to suppress plant vigour to some extent, leading to reduced yields and variable fruit quality. Delayed cropping is, therefore, usually reserved for over-vigorous plantations in their final cropping year. Yields are typically reduced by around 20%.

Deep straw

The most common method used to delay outdoor crops is deep straw which, as the name suggests, uses a deep layer of straw to smother the plants. This is usually laid in late winter (January-February) in cold/frosty conditions. The straw not only excludes light, but also traps cold air around the plants, further reducing the growth rate.

The timing of straw removal depends upon the vigour and appearance of the plants, with April being the most common time (Figure 17). The straw is gently drawn back from the plants, which are allowed to develop through the straw. The straw also protects young growth from cold winds.

White-on-black polythene

White-on-black polythene has been used more recently. Polythene sheets are laid over the top of the crops and weighted down with the white side uppermost (Figure 18). This excludes light from the plants. As the polythene sheets are not perforated, extra weights are required to avoid sudden up-lift. The sheets are usually laid for only four to six weeks as the exclusion of light can significantly weaken the plants. They are laid in early March and removed from early to mid-April, depending on the vigour of the plants.

Outdoor field, 60-day and tabletop production

Any mainseason variety that has initiated flowers in response to shortening day length and fall in temperature can be kept in cold storage for several months. It can then be planted out at a pre-arranged time with the aim of harvesting it some 60 days later (Figure 19). High temperatures can lead to harvest as little as 40 days after planting.

17 Deep straw drawn back from a crop of Florence in April

The variety *Elsanta* lends itself well to such manipulation and can be planted from late April until July on outdoor sites to crop some 60 days later. The plantations can then be kept for cropping again the following season.

The 60-day cropping system offers growers an ideal way to extend the season of production into late summer and early autumn. Varieties such as Elsanta and Sonata respond well to this form of manipulation.

Outdoor and protected field everbearer production

As everbearing varieties produce flowers irrespective of day length, they can flower and fruit at all times during the growing season. They therefore lend themselves particularly well to manipulation.

With everbearers, the winter and spring flower is usually removed to allow the plant to grow its leaf canopy. The early summer initiated flowers are then allowed to develop from late May onwards, so that the first fruits start to ripen in late June and early July.

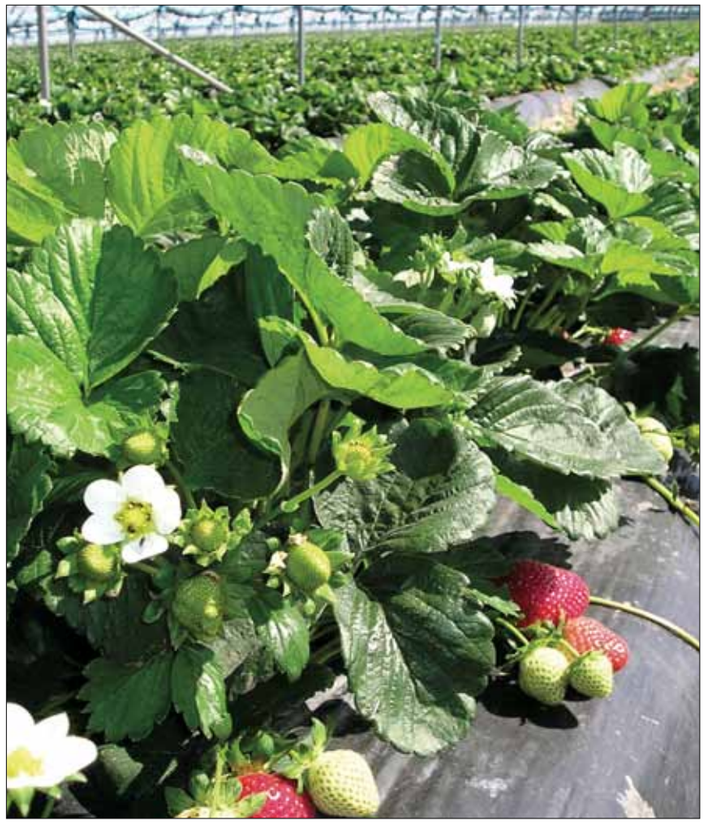
18 Crop covered with white-on-black polythene

19 Crop of 60-day Elsanta at green fruit stage

Thereafter, all new flowers are allowed to continue to develop and produce fruit until the first frosts occur (Figure 20). Where growers wish to extend the season of production into late October and November, field-grown crops of everbearers can be covered with portable French or Spanish tunnels. The majority of field grown everbearers are now covered with tunnels to comply with supermarket customer quality requirements. However, in many cases the tunnels are not clad until the onset of harvest. This avoids increases in temperatures early in the season which can give rise to thermodormancy in the plants.

Portable tunnels for tabletop everbearers

Where portable tunnels are used with tabletop everbearers, the system of production is almost identical to that described for tabletop production of mainseason varieties under tunnels and, like field-grown everbearers, the spring flowers are removed to delay cropping until early July onwards.



20 Crop of Everest in full production

Further information

Names and addresses of UK strawberry plant suppliers offering plants with a Defra plant health certificate

Hargreaves Plants Ltd
Cowpers Gate
Long Sutton
Spalding
Lincs PE12 9BS
Tel. (01406) 366300
www.hargreavesplants.com

T J Moore
20 Bilney Road
Gressenhall
Dereham
Norfolk NR20 4EG
Tel. (01362) 861091

Edward Vinson Plants Ltd
4 Ewell Barn
Graveney Road
Faversham
Kent ME13 8UP
Tel. (01795) 537500
www.edwardvinson.co.uk

R W Walpole
(Strawberry Plants) Ltd
Ivy Farm
Tuxhill Road
Terrington St. Clement
Kings Lynn
Norfolk PE34 4PX
Tel. (01553) 828829
www.rwwalpole.co.uk

Welsh Fruit Stocks
Bryngwyn
Powys
Via Kington
Hereford HR5 3QZ
Tel. (01497) 851209

Woods Nurseries Plants Ltd
Tarry Hill
Swineshead
Boston
Lincs PE20 3LL
Tel. (01205) 821155
www.woodsnurseries.co.uk

Names and addresses of UK based suppliers of polythene covers and tunnel structures

Brinkman UK Ltd
Heron Buildings
Plaxton Bridge Road
Woodmansey
Beverley
East Yorkshire HU17 0RT
Tel. (01482) 842123
www.brinkmanuk.co.uk

Elite Tunnels Ltd
The Office
Arnhall Farm
Edzell
Scotland DD9 7UZ
Tel. (01356) 648598
www.elitetunnels.com

Field (GB) Ltd
Unit 1
Counter Buildings
Brook Street
Woodchurch
Ashford
Kent TN26 3SP
Tel. (01233) 861080
www.irrigation.co.uk

Gromax International Ltd
The Hall
Willisham
Ipswich
Suffolk IP8 4LS
Tel. (01473) 657555
www.gromax-int.com

Haygrove Tunnels
Haygrove Ltd
Redbank
Ledbury
Herefordshire HR8 2JL
Tel. (01531) 633659
www.haygrove.com

Hortech Solutions Ltd
Bromyard Road
Ledbury
Herefordshire HR8 1LG
Tel. (01531) 632172
www.hortechsolutions.co.uk

J & K Polyculture (IOW) Ltd
Walton
Moor Lane
Brightstone
Isle of Wight PO30 4DL
Tel. (01983) 741444
www.jkpoly.co.uk

NP Structures Ltd
t/a NorthernPolytunnels
Mill Green
Waterside Road
Colne
Lancashire BB8 0TA
Tel. (01282) 873120
www.northernpolytunnels.co.uk

Osprey Tunnels Ltd
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Acknowledgements

Images and diagrams

All images were provided by ADAS except Figures 12, 14 and 18 (copyright Haygrove Ltd) and Figure 13 (copyright FAST Ltd). Diagram 1 was provided by FAST Ltd.

Additional information:

August 2010

Design and production: HDR Visual Communication