

SURREY NURSERY STOCK PROPAGATORS

J. STANLEY, N.D.H.¹

*Merrist Wood Agricultural College
Guildford, England*

The Surrey nursery industry produces about 12% of the total of hardy nursery stock produced in the United Kingdom. It is an area of mainly small wholesale growers situated to the Southwest of London.

HISTORY OF THE INDUSTRY IN SURREY

The nurseries developed in the 18th and 19th centuries when English landscape gardening was at its peak and various plantsmen were introducing new plants, especially from America. The result of this was "American Specialist" nurseries, such as Waterers, Veitch and J. Gordon.

Since the 19th century the area has had a chequered history. The first mail-order nursery in the U.K. started in the Surrey area in the 1920's. This was at the same time as a soil embargo was started when selling to the United States. Today the area is going through change; container production is on the increase and the nurserymen have to compete with larger wholesale nurseries in other parts of the country.

THE AREA TODAY

The area today still mainly consists of small wholesale nurseries, but these are mainly specialist growers. It is impossible to mention all the nurseries or even all the specialisms, but the following nurseries illustrate the type of small specialist growers which exist in the area.

Hagthorne Cottage Nurseries. Hagthorne is a 1 ha nursery producing 16,000 miniature roses. Grafting is preferred to cuttings as cuttings produce weak plants which only last 2 to 3 years before deterioration starts. Grafting is by a single-bud graft.

Waterers of Bagshot. This nursery has a total of 70 ha and is the wholesale member of the Waterers group. The nursery produces 20,000 rhododendrons, of which 30% are *Rhododendron yakushimanum* hybrids.

In the early 1950's, the late Percy Wiseman commenced crossing this rhododendron with other compact-growing large-flowered hybrids to produce dwarf, free-flowing plants which he felt would be suitable for the small gardens of the future.

¹ Lecturer in Nursery Practices.

Gradually the desired results materialized and the first generation hybrids were released in 1958, followed by the second in 1964/65. Waterers are now starting to release the third generation.

Windlesham Court Nursery Ltd. Windlesham Court is a 2 ha nursery which started producing heathers 8 years ago. They are the main specialists of this crop in the United Kingdom. Production takes place in 4.3×27.5 m tunnels; 50 tunnels are erected on the nursery and each tunnel holds 12,000 heathers.

The key to growing at Windlesham is simplicity and speed although a number of problems had to be overcome. One of these, *Phytophthora cinnamomi*, is fairly common in the U.K., but Windlesham is free of this disease by having a routine cleaning programme. Before production, all structures are sterilized and stock plants checked for cleanliness. Another problem for growers, and especially heather specialists in Surrey is the high pH (7.5) of mains water. Due to this a Waterwch de-ionizer is used. Water, having passed through a de-ionizer, has a pH of 4.5.

Normandy Ground Covers. This 1.5 ha nursery is a wholesale grower with a turnover of 60,000 ground cover plants, most of which are grown in polythene plants rolls. Rolls have been found to be convenient and quick for contract planting. Rooted cuttings are transplanted into the roll which contains an Osmocote container mix. Plants can be removed from the rolls quickly with the minimum of root disturbance and can be planted in narrow space nicks. Root depth in the roll is superior to the usual shallow pot-balled plants with the result that establishment is excellent even in dry weather.

Round Pond Nurseries. Round Pond is 3 ha intensive wholesale production unit on the northern edge of the main Surrey hardy nursery stock area that specializes in deciduous azaleas. Production takes place in 4.3 metre wide \times 27.5 m long tunnels. These are covered with film plastic. To aid the operation of cladding, a special fixing strip, the Goffton strip, is used to hold the plastic film in position and, therefore, obviates the need for buying in plastic; this means that the polythene is reusable. To ensure a clean and hygienic production area, the whole site of the tunnel complex has been drained with open drains filled with stone.

Propagation is in a $6.7 \text{ m} \times 27.5 \text{ m}$ long tunnel. This house has four concrete pads 12.2 metre long by 1.8 metre wide which have thermostatically controlled heating cables embedded in them. All propagation takes place in plastic trays which stand on the concrete beds. These beds have a crossfall of 50 mm to ensure good drainage. Mist lines are suspended from the

house superstructure to ensure an unobstructed work area.

Production of azaleas is on a 2 year cycle. Stock plants are planted in a structure which is closed in January to encourage growth; at the same time a base dressing and a mulch of spent hops is given to retain moisture.

EDUCATION IN SURREY

The nurserymen mentioned are five members of the Surrey Hardy Nursery Stock Discussion Group. This group meets on an informal basis once a month to discuss topical matters. Meetings take place at Merrist Wood Agricultural College, Worplesdon, Guildford, which is situated on the southern edge of the nursery area.

Merrist Wood is one of three colleges (the others being Hadlow and Pershore) which train nursery students to the level of the Ordinary National Diploma (3-year course). The College has 300 full-time students and gives courses in Agriculture, Arboriculture, Landscape Construction and Nursery Practices.

The College serves the industry in a number of ways. Apart from educating students at all levels for the industry it also acts as a Conference Centre as well as having close liaison with the industry on project work which is carried out by third-year nursery students. Such projects include, for example:

Ericaceous Compost Trials: For a number of years the College and some growers in the areas have had problems with growing plants in containers. To try and solve these problems a trial was started in 1973 to look at the range of composts being used and the effect of the compost on plant growth. Results so far have been variable but a number of important points have arisen. These include the importance of checking sand pH and free lime content, especially when the College water pH is 7.5. Various methods have been tried to reduce pH, including the use of choline phosphate which is new to the British market. Choline phosphate can reduce the pH by 1.0, but increases the phosphate levels in the compost.

Other projects have included looking at new methods of propagating *Nothofagus*, the use of peat blocks for propagation, and comparing different budding techniques for tree production.

Wednesday Afternoon Session, August 25, 1976

The Wednesday afternoon session convened at 1:30 p.m. with Dr. Harold Tukey serving as moderator.