

would give rise to delayed bud break the following spring. Secondly, it was beneficial to apply a hormone as it was more important to allow roots to initiate as quickly as possible irrespective of any delayed bud break the subsequent spring — a strength of 0.3-0.8% (3000 to 8000 ppm) IBA in talc being used.

The point that single leaf-bud cuttings should not be inserted too deeply was stressed and the benefits of “re-striking” cuttings which had failed to root were pointed out.

Rooting media A wide range of composts had been successfully used. Pure grit was used for striking cuttings in cold frames, while differing ratios of peat/sand and peat/perlite were used for mist. Pure peat was reported to be used for closed case conditions.

Propagation Facility Mist propagation was most widely used although other facilities had produced good results.

DISCUSSION GROUP REPORT THE USE OF PLASTICS

Chairman - M.G. Adcock

Nearly everything today consists, in some part, of plastic in its various forms. We walk on it, the interior of our cars is almost made of it, we wear it, even wrap our food in it — one could go on almost indefinitely. The only thing we find difficult about the stuff is getting rid of it. It will not burn, but just disintegrates into something like boiling oil. Nevertheless, we would find life quite different without it. Indeed, in horticulture we rely on it no less than many other industries. Incidentally, polythene was introduced in 1933, but, due to the war, most of the polythene was produced to that end.

As one can see, this is a very diverse and complex subject, possibly too ambitious for one short session. We had a very interesting and useful discussion. I gathered from most of the members that for many of their production methods, a substitute for plastic would be very hard to find. The polythene sheet has the unique advantage of being very quickly erected on a suitable area to provide the correct environment for growing and propagating plants. It is an easily managed material; also, in most cases, more economical than glass. With the advent of the low U.V.I. plastic and the white type, I am sure it has a very long and expanding future in horticulture providing this material, which is a by-product of oil, is available to us in the years to come. Indeed, many new growers are setting up businesses entirely with polythene houses covering a very large area having multi-bay structures.

The first question was availability of plastic material. Although the supply in the last twelve months has been at times difficult, I was assured by one very large producer that though the price would not reduce, supplies would be maintained. M.J. Hall of Roundpond Nurseries commented that some firms were now taking back old plastic sheets and reprocessing this, though the quality was not so good. He also told us about plastic grooved strips for fixing plastic sheet to either metal or wooden battens. (This was exhibited at the Conference).

Another member suggested there could be other materials such as P.V.C. sheet, but Mr. Kelvin Lawrence said this would be too expensive.

Most of the discussion centred around polythene structures, and when asked how did the members feel about inflated polythene houses a blank expression appeared on faces and heads were shaken, completely deflating the Chairman. I gathered they were not keen on this type of house.

H.J. Eaton of Camborne, Cornwall, did have problems with multi-bay structures in the high winds in that area. He found it was necessary to have a very strong framework before cladding with plastic sheet as the winds pushed in the sides.

Regarding ventilation, many members were not particularly happy as side vents tend to create draughts, but at the moment there seems to be no alternative. Also, the question of doors arose with no satisfactory answer. It still seems that many growers are do-it-yourself types with their own modifications.

Mr. J. Edmonds of Bransford Nurseries was using double skins on his poly-houses to insulate against outside temperatures. An electric fan was providing the air to create a space between the two skins of $\frac{3}{4}$ " ; this system maintains a more static temperature in unheated houses.

The use of rooting cuttings in plastic foam waste, i.e. Bayer Sub Strat, etc., was not favoured by most of the members of the Discussion Group. The general feeling was the percentage of successful rooting was not as high as conventional sand/peat mixes, especially with tree and shrub production.

The Chairman mentioned that at Hilliers they were using 1" alkathene pipe for bottom heat in frames and propagating houses, this combined with a heat exchanger (calorifier) was producing heat much cheaper than electricity. The heat was provided from the main boiler. It was stated that 180°F is the maximum temperature one should use with alkathene pipe.

Mr. Byford of East Malling apparently had some problems with the use of S.600 (liquid plastic); he stated it peeled off very quickly, but on discussing this it was found he did not dilute the

material enough. S. 600 has been used quite successfully with grafting very soft scion material and, of course, is a great help when moving large plants where it controls transpiration.

Steve Haines asked if anything had been done with hardwood cuttings under polythene film. At Hilliers we root annually about 20,000 *Platanus x acerifolia* cuttings under white plastic. They are first hormone-treated until the base of the cutting swells. This is done in a little heat, they are then transferred to the polyhouse and stuck two-thirds deep in sand with the house closed. These cuttings quickly root; when air is given they grow on until early autumn when the plastic cover is completely removed. These plants are then about 4' high and are planted in the open ground by machine.

PLANTS WORTHY OF WIDER CULTIVATION¹

Moderated by John Bond and Christopher Lloyd

CLEMATIS 'ETOILE ROSE' - Christopher Lloyd. Introduced 1903, a *C. texensis* hybrid; propagation by cuttings from stock plants, cut hard back in winter, cuttings taken in May using laterals.

CLEMATIS 'AURORA' 'DAWN' - Ray Evison. Very free flowering in May/June, grows 8-10 feet. Propagation by normal system of clematis cuttings.

CLEMATIS FARGESII VAR. *SOULIEI* - Ray Evison. Very free flowering June/Sept., grows 10-15 feet. Propagation by seed or normal cuttings.

AESCULUS NEGLECTA 'ERTHROBLASTOS' - Norman Villis. Spring foliage for 3-4 weeks in shrimp pink. A slow growing tree at least in eastern England. Propagated successfully using a spring greenwood graft, by wedge grafting into the hypocotyl of a recently germinated *Ae. flava* or *Ae. hippocastanum*.

QUERCUS RUBRA 'AUREA' - John Bond. A beautiful yellow foliage tree requiring some shade for best leaf colour. Propagation by conventional late summer grafting on *Q. rubra* rootstocks with closed case treatment.

SORBUS REDUCTA - Jim Sutherland. A dwarf Rowan reaching only 15-18 inches in height, notable also for its fine autumnal foliage colouration and prolific berrying. Propagation is from seed which if autumn sown and left exposed to normal winter cold will germinate the following spring.

¹ This session proved extremely popular. Sixty plants were described with the aid of slides or living specimens. The editor has therefore used his discretion in reducing the list, eliminating mainly those of limited hardiness or those which are already fairly well distributed.