

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.

DAPHNE GENKWA - Mike Clift. A Japanese plant and unusual for a daphne in being deciduous and mid-winter flowering. The flowers are an unusual shade of blue. Propagation is readily achieved by root cuttings taken in the dormant season.

HOHERIA LYALII - Brian Halliwell. One of the hardier members of this genus which tolerates the British climate. Grown for the red young foliage, therefore necessary to clip over to keep colour coming.

PICEA LIKIANGENSIS var *PURPUREA* - John Gaggini. A fine upright spruce with violet-purple buds and young cones. Propagation from seed.

PINUS MUGHO var. *ROSTRATA* 'NANA' - John Gaggini. A dwarf pine used extensively in Scandinavia.

JUNIPERUS SQUAMATA 'BLUE STAR' - Kelvin Lawrence. A dwarf juniper of prostrate habit with typical squamata foliage but of a brilliant light blue. Easily propagated from cuttings.

CHAMAECYPARIS LAWSONIANA 'FLETCHERII YELLOW TRANSPARENT' - Kelvin Lawrence. A yellow form of the well known type. Easily propagated from cuttings.

ERICA CARNEA 'ANNE SPARKES' - Peter Hutchinson. A golden foliage spot of E.c. 'Vivellii' - good all year round colour, yellow with orange tips. Normal heather propagation techniques satisfactory.

BERBERIS 'HARLEQUIN' - Kelvin Lawrence. A variety with similar colouration to B. 'Rose Glow' but the variegation appearing in the early part of the season.

BERBERIS VALDIVIANA - Norman Villis. An evergreen species of *Berberis* from Chile. A hardy plant with glossy, lanceolate leaves and a columnar habit. Free flowering.

GRISELINIA LITTORALIS 'VARIEGATA' - John Edmonds. A good white variegated (marginal) plant, hardier than is generally supposed. Similar vigour to the type.

GRISELINIA LITTORALIS 'BANTRY BAY' - Alison Bland. A much slower growing variegated form. Propagated easily by cuttings from November to March.

MYRTUS APICULATA 'GLANLEEN GOLD' - Alison Bland. An outstanding white variegated form which received considerable comment. September cuttings under mist succeed well.

BUPLEURUM FRUTICOSUM - Muriel Blore. An old established plant not now easily obtainable, prefers a sheltered position to produce its golden flowers. Easily propagated by cuttings or seed.

SIDALCEA 'DOUBLE DELIGHT' - Alison Bland. An unusual variant of this herbaceous plant with double flowers. Propagated by division or Irishman's cuttings.

AJUGA REPTANS 'RAINBOW' - Muriel Blore. A startling variegated form of this native plant used for carpet ground cover. Easily propagated by division.

VERATRUM - Christopher Lloyd - showed several species of this liliaceous subject. Propagation by seed which exhibits epicotyl dormancy.

PHORMIUM - Brian Halliwell showed several of these "architects" plants from New Zealand including *P. COLENSOI* (*P. COOKIANUM*) 'TRISTE' a 3 foot high, hardy form and *P. COLENSOI*, also a very hardy type.

DIERVILLA SESSILIFOLIA - J.A. Hayes. An unusual plant with sulphur yellow flowers and good, small habit. Easily propagated from cuttings.

EUCALYPTUS PAUCIFLORA - J. Simmerley. A 40 foot high tree with a white trunk and deciduous bark. A good skyline tree. Hardy - surviving to 0°F. Propagation from seed which is readily available; plant out as soon as feasible; do not hold in containers.

RAISING HARDWOODS FROM SEED

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In the pattern of nursery stock production in the United Kingdom the propagation of plants from seed is a subject which has received scant attention from a practical standpoint during recent decades. Although much has been achieved in furthering our knowledge of most aspects of vegetative propagation and our forefathers would marvel at the sophistication of our techniques in this field, our normal practical methods of seed propagation show little change from their day.

Many of us grow hardwoods from seed and probably give the matter little thought except perhaps in terms of mechanisation. We accept too thick a stand this year - too thin a stand next year, we use rule-of-thumb measures for achieving sowing rates, which are based on figures culled from forestry publications or out-of-date and unreliable horticultural textbooks. What I hope to do is to present a few new facts, correlate existing information, and