DISCUSSION GROUP REPORT
FIELD BUDDING
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Budding was generally favoured to other forms of grafting because it was economical of time and material. Spring grafting was particularly inconvenient due to the seasonal work load but bench grafting was recognised as a useful technique providing work in bad weather, capable of being mechanised and reducing the duration of land use. Benefits of faster production by bench grafting were often offset by inferior maiden trees in all but the most vigorous subjects. The use of a single bud obviated the need to select a leader from among a number of shoots as in grafting. A recent study in fruit and ornamental tree production showed budding to be a major cost factor, being second only to tree lifting and sometimes stock planting (2). It was clear, therefore, that a better understanding of the principles of good budding was needed to ensure maximum success and, to a large extent, recent studies on chip budding had met this need (1).

Species in which problems were few and in which failure could be attributed to an obvious cause included *Crataegus, Fraxinus, Laburnum, Malus, Salix, Sorbus, Tilia* and *Ulmus*. An intermediate group included *Acer platanoides, Aesculus*, and ornamental cherries for which special care was needed to achieve consistent success. With *Aesculus* the selection of large buds and the use of vigorously growing stocks either very early in the season or at two years old after becoming well established was recommended. Problems with *Acer* were also considered to be linked with season of budding in relation to stock growth and there was a general feeling that a basic underlying problem in this group was poor rootstock growth due to poor grade out, late planting or difficult conditions. With most of this intermediate group chip budding had proved worthwhile but with ornamental cherries the tying material used, even in shield T budding, was critical, polythene or plastic tape being superior to rubber or raffia where release was uncontrolled.

A third group difficult to obtain success with under British conditions included *Alnus, Betula, Fagus, Robinia* and snake-barked maples; it was accepted that these should either be raised from seed or grafted as appropriate.

LITERATURE CITED

1. Howard, B.H., Skene, D.S. and Coles, J.S. (1974). The effects of different grafting methods upon the development of one-year-old nursery apple trees. *J. hort. Sci.*, 49, 287-95.
2. Patt, C.J. (1974). The cost of maiden apple trees: an analysis of two methods of propagation and subsequent production in the U.K. Project Report No. 83, School of Biological Sciences, University of Bath, pp 50.