

INCOMPATIBILITY SURVEY AMONG HORTICULTURAL PLANTS

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Introduction

The problem of scion varieties failing to make satisfactory growth when budded or grafted to certain rootstocks has been confronting nurserymen and growers for years. Grafting would seem to date back to antiquity. The early heterogeneous combinations attempted were recognized as unsuitable in pre-biblical days (212) and also mentioned in early Chinese writings (43). The phenomenon of incompatibility, also known by the synonyms of uncongeniality or lack of affinity, has been common in a number of genera but more publicity has been given to fruiting trees, possibly because of the economic importance.

This survey was undertaken by the author for the International Plant Propagators' Society, Eastern Region, and partly financed by the organization. It was initiated by canvassing the membership in both the Eastern and Western Regions. As shown in the bibliography, many usable returns were obtained, but the survey was supplemented to a large extent by a search of the literature.

It is not the intention of the author to duplicate the work of excellent reviews on the subject in earlier years. Emphasis has been placed on the period beginning in 1960 but certain earlier references have been cited to fill in information and to establish a trend of thought on incompatibility. To reduce the length of bibliography, free use of other review papers has been made. In particular, two excellent reviews, one by Argles (8) in 1937 (194 references); and one by Mosse (173) in 1962 (133 references) were used extensively. Although not proficient in languages other than English, a book by Hass and Hildebrandt (66) in German was reviewed and it is an up-to-date review in that language.

Admittedly, the survey is incomplete but a survey of this nature can never be complete with obscure journals and new information being encountered continuously. It is hoped, however, that the compilation of information will be of interest and aid to the propagator.

Literature Review

It is only natural that the first classification of incompatibility was made on external appearances. Briefly, Argles (8) classified them as follows: no union, low percentage of union, high degree of decline and mortality or breakage during normal life-span, ill health, dwarf and stunted trees, and swollen unions. Also in 1937, Chang (43) noted other external symptoms which included late bud break, early defoliation, defoliation started at tip instead of base, gummosis on

Prunus, decline in annual wood production, decline in root growth, and smaller scion/root ratio.

Obviously, these observations and classifications used in the earlier reports need not only be caused by incompatibility. No union and low percentages can be mechanical difficulties caused by the nature of the wood (277), diameter of root-stock (46), nature of the bud (277), and type of propagation (194) 231. Environmental factors (11) and season (281) affect nursery stands as well as the occurrence of soil-borne diseases (3, 49) and insects (49) in the graft area. The treatment of grafts, such as, callusing (98, 99, 137), stratification (167), the use of growth substances to increase success (167, 210), the use of various binding materials (10, 90, 281), the use of various antidissecants (90, 98) and leaving buds on the stock (142) play a part in bud and graft survival. In fact, although waxing of grafts has been a common practice, it was recently discovered that one of the waxes used contained an inhibitory substance (216). Add to these the practice by some propagators of shading (99) or protecting new grafts with polyethylene (191) and it is easy to see that grafting success can vary widely among different propagators. Even though percentage take is still the index used by many propagators for their definition of incompatibility, it cannot be very well substantiated (173).

Although some anatomical and histochemical attributes of incompatibility were reported by Chang (43), the internal aspects were studied more in later years. From 1937-1961 considerable literature was published and Mosse (173) reassessed the causes of incompatibility, particularly those referred to as "delayed incompatibility". During that period, the fact that certain types of incompatibility could be transmitted became known. Although other new classifications were reported by Mosse in her review (173), she postulated, from the literature and her own work, a very simple classification based on "translocated" and "localized" types of incompatibility. Basically, the division is based on the criteria that translocated types could not be corrected by an inter-stem, while the localized type depends on contact and could be corrected by a mutually compatible inter-stem. She also points out, however, that a graft combination may be afflicted by both types and that manipulations to overcome the one that is visible may only make the other apparent.

Certainly some of the immediate causes of incompatibility was mechanical weakness at the union and Chang (43) in his review cites wood and bark discontinuity, parenchymatous tissue accumulation at the union which may later collapse and form lacunae, and incurved layers of cells at the union which caused clean breaks when the union was placed under stress. Mosse (173) cites reports of clean breaks because of discontinuity in a number of species including apple, pear, plum, apricot, citrus, oak, beech, conifers, and various ornamental

plants. The underlying cause of this discontinuity is not specified in the literature but toxins, as exemplified by prunasin in Quince (209) causing similar discontinuity between pear and quince, could be the reason. Resins in coniferous material may act as a barrier to a solid union (279). Similarly, suberin in the bark area of Douglas Fir has caused discontinuity (53). Even though current wood in certain *Prunus* grafts may be normal, gummosis and the gelatinization of middle lamella may give subsequent breakage at the union. Certainly, lack of lignification and the formation of a mutual middle lamella at the union (30) the irreversible fixation of hydrolysed lignin materials (29), and polyphenoloxidase activity (92) at the union are other reasons for this weakness.

In early reports (43), starch accumulation at the union was cited as proof of discontinuity of the tissue. In citrus, however, there appeared to be no correlation of starch accumulation and various compatibilities (165). Certainly starch accumulations do sometimes occur on either side of the union (43, 134) but this has been proven to be blockage of conducting tissue rather than discontinuity of the tissue as previously thought (173), 222). Conductance of other manufactured foods (245), nutrients (72, 245) and water (54) are also effected.

Recently, virus diseases have been associated with some of the "delayed incompatibility" symptoms of ill-health, die-back, and death (173). Because virus-free components behave normally, Mosse (173) does not consider virus susceptibility of one of the components as true incompatibility. It is a problem, however, that confronts the nurserymen and should be discussed. One of the early reports (91) suggests that there may be more than one virus and this is a well-known fact now with a number of virus being described (188, 275). There is no doubt that virus is a serious problem and has become widespread in all the fruit growing countries (14, 204, 275, 276), but possibly all of the disorders quickly attributed to virus by horticulturists is not correct as exemplified by pear decline (173) or structural weakness (187). Furthermore, plants show a great variability to decline (13, 22) and in some instances virus infection may not noticeably effect performance of production (35). Also of interest, is the fact that two virus infected, but obviously tolerant components, show no symptoms similar to incompatibility, whereas either grafted to a virus-free, susceptible component will bring about death of the unit (2). Virus spread through clonal rootstocks is well recognized but spread by contaminated grafting tools has also been reported even where normal sap transfer has not been successful (87).

Other aspects of incompatibility that tend to confuse is the fact that certain combinations may prove compatible at one location and not at another (173). Minor varietal mutations have been suggested in explanation (173) but geographi-

cal location of the scionwood (132) and the effect of temperature on virus activity (4) has also been suggested. Geographical location and the effect of growing season as well as varietal differences in the time of starch accumulation (89) is also thought to affect incompatibility. This in turn could affect frost hardiness and incompatible combinations are considered less hardy (134, 135) and could further contribute to their early death.

It has been reported that varieties change as exemplified by the Conference pear in England becoming more incompatible with Quince (151). Still more confusing, however, is the fact that three mutually compatible plant materials when worked in any combination of two will be satisfactory but incompatible when all three are put together in one unit (104). Likewise, reciprocal grafts may behave quite differently (152).

Some incompatibility is considered to be based on genetic characteristics (126, 175, 205) and others not (13, 136). D.N.A., however, as associated with virus incompatibility, is high in the scions of incompatible varieties (283) and it is possible that studies in cell biology and cell chemistry may shed new light on incompatibility in the future.

Incompatibility studies have been primarily trial and error. There are, however, certain indices that have been suggested recently. These include seriological methods of protein type analyses (70), analyses of polyphenoloxidase activity (92) downward transportation of radio-active phosphorus (164), rate of transpiration (92), and ratio of scion-rootstock growth (43). One index often thought to be a factor is small-fruited species but this does not seem to be so (136).

Graft Combinations in Survey

The information was received in many forms and also was derived from many sources. With apologies to the 'true botanists' among the readers, an attempt has been made to classify the information according to genera and species. In some cases, however, the term 'unspecified' has had to be used because the donor could not supply further information, the origin was unknown or the original information was not readily available in the English language. It is hoped, however, that the reader will recognize the material pertinent to him even though it may not be fully classified botanically.

Such a review is a never ending task and in the ten days reserved for final preparation, new information has come to light. Furthermore, it is impossible to conceive that any such review would ever be a complete coverage of all literature. For this review, the main sources of horticulture literature was used and heavy use was made of Horticultural Abstracts. The survey was restricted to the horticultural field but many more references could have been obtained if the field of forestry had been explored.

In the presentation, clonal rootstocks, where known, were specified and others are assumed to be of seedling origin. Interstem and top-worked combinations are denoted under the rootstock heading using the usual oblique (/) mark between the component parts. For simplicity and reduction of space the scion varieties are sorted according to genera and then subdivided by rootstocks presented in alphabetical order.

LIST OF COMBINATIONS

ROOTSTOCK	SCION	REMARKS
ABIES.		
<i>Abies cephalonica</i>	<i>A. unspecified</i> (116)	Better than <i>A. alba</i> and <i>A. nordmanniana</i>
<i>Abies concolor</i>	<i>A. concolor nana</i> (263), <i>A. concolor</i> 'selections' (185)	
<i>Abies frazeri</i>	<i>A. unspecified</i> (156)	
<i>Abies nobilis</i>	<i>A. lasiocarpa arizonica</i> (26)	
ACER.		
<i>Acer cappadocicum</i>	<i>A. lobelli</i> (116)	
<i>Acer coriaceum</i>	<i>A. nigrum</i> (116)	
<i>Acer ginnala</i>	<i>A. platanoides</i> 'Crimson King' (277), <i>A. saccharinum</i> (277)	Unsuccessful
<i>Acer negundo</i>	<i>A. plantanoides</i> (243)	Unsuccessful
	<i>A. plantanoides</i> 'Crimson King' (277)	Shields knitted, buds failed
	<i>A. saccharinum</i> (243, 277), <i>A. saccharum</i> (277)	No take
<i>Acer nigrum</i>	<i>A. nigrum ascendens</i> (74)	
<i>Acer palmatum</i>	<i>A. japonica aureum</i> (263)	Poor Union
	<i>A. nigrum</i> (38), <i>A. palmatum atropurpureum</i> (38, 185), <i>A. p. 'Burgundy Lace'</i> (7), <i>A. p. dissectum</i> (32, 38, 156, 263), <i>A. p. unspecified</i> (7, 34, 97, 215), <i>A. rubrum 'Ashi-Beni'</i> (36, 185), <i>A. r. 'Bloodgood'</i> (38, 185), <i>A. unspecified</i> (97)	
<i>Acer palmatum atropurpureum</i>	<i>A. rubrum 'Ashi-Beni'</i> (131), <i>A. r. 'Bloodgood'</i> (131), <i>A. r. 'Buddi'</i> (131)	Satisfactory – suspect virus
<i>Acer platanoides</i>	<i>A. lobelli</i> (116)	Poor
	<i>A. platanoides</i> (155, 185), <i>A. p. erectum</i> (74), <i>A. p. 'Crimson King'</i> (155), <i>A. p. schwedleri</i> (155), <i>A. p. 'Pyramidal'</i> (155), <i>A. p. variegatum</i> (74)	
<i>Acer pseudo-platanus</i>	<i>A. nigrum</i> (116), <i>A. pentaphyllum</i> (116)	
<i>Acer rubrum</i>	<i>A. franchetti</i> (116)	
	<i>A. rubrum</i> (97), <i>A. saccharinum</i> (75)	Few incompatibilities
	<i>A. saccharinum</i> (32)	
<i>Acer saccharinum</i>	<i>A. hircinum</i> (116)	
	<i>A. platanoides 'Crimson King'</i> (211)	Dwarfs
	<i>A. platanoides 'Crimson King'</i> (277), <i>A. saccharum</i> (277)	Stock bark overgrows bud
	<i>A. rubrum</i> (221) <i>A. rubrum</i> (211)	Delayed incompatibility Dwarfs

ROOTSTOCK	SCION	REMARKS
	<i>A. rubrum</i> unspecified varieties (97)	
	<i>A. saccharinum</i> 'Blairs' (185), <i>A. s.</i> 'Improved' (185), <i>A. s.</i> 'Pyramidal' (185), <i>A. s.</i> 'Skinneri' (185)	
	<i>A. saccharum</i> (277)	Seems to take but fails within year
<i>Acer saccharinum</i> <i>wieri</i>	<i>A. saccharinum wieri</i> <i>laciniatum</i> (194)	
<i>Acer saccharum</i>	<i>A. hircinum</i> (116) <i>A. nigrum</i> (32) <i>A. nigrum ascendens</i> (74), <i>A.</i> <i>nikoense</i> (74) <i>A. platanoides</i> varieties (263) <i>A. saccharum columnare</i> (74), <i>A. saccharum</i> varieties (32), <i>A. senacaensis</i> (74)	Incompatible Unsuccessful Poor Union
<i>Acer tataricum</i>	<i>A. palmatum</i> varieties (263)	Poor Union
ACTINIDIA		
<i>Actinidia</i> unspecified	<i>A. unspecified</i> varieties (97)	
AESCULUS		
<i>Aesculus hippocastanum</i>	<i>A. carnea</i> (142, 185), <i>A. c. briotii</i> (74, 142, 185, 263), <i>A. hippocastanum</i> (97), <i>A. h. plena</i> (142), <i>A. parviflora</i> (142)	
ALNUS		
<i>Alnus</i> unspecified	<i>A. unspecified</i> varieties (97)	
AMELANCHIER		
<i>Aronia melanocarpa</i>	<i>A. canadensis</i> (277)	Seemed to take, failed overwinter
<i>Crataegus crus-galli</i>	<i>A. grandiflora</i> (185)	Incompatible
<i>Crataegus oxyacantha</i>	<i>A. grandiflora pubescens</i> (185)	
<i>Crataegus</i> unspecified	<i>A. alnifolia</i> cultivars (266), <i>A. unspecified</i> varieties (97)	
<i>Cotoneaster acutifolia</i>	<i>A. canadensis</i> (277)	Shield took, buds failed
<i>Malus pumila</i>	<i>A. alnifolia</i> cultivars (266) <i>A. canadensis</i> (277) <i>A. grandiflora</i> (185)	Shield took, buds failed Incompatible
<i>Pyrus communis</i>	<i>A. canadensis</i> (277)	No take
<i>Sorbus</i> unspecified	<i>A. alnifolia</i> cultivars (266), <i>A. unspecified</i> (97)	
AMPELOPSIS		
<i>Parthenocissus</i> unspecified	<i>A. unspecified</i> varieties (97)	

ROOTSTOCK	SCION	REMARKS
ARALIA:		
<i>Aralia</i> unspecified	<i>A.</i> unspecified varieties (97)	
ARISTOLOCHIA.		
<i>Aristolochia</i> unspecified	<i>A.</i> unspecified varieties (97)	
ARONIA		
<i>Amelanchier candensis</i>	<i>A. melanocarpa</i> (277)	No take
BAUHINIA		
<i>Bauhinia purpurea</i>	<i>B. blakiana</i> (7)	
BERBERIS		
<i>Berberis thunbergii atropurpurea</i>	<i>B.</i> unspecified evergreen varieties (97)	
<i>Berberis vulgaris atropurpurea</i>	<i>B.</i> unspecified evergreen varieties (97)	
BETULA.		
<i>Betula alba</i>	<i>B. nigra</i> (263), <i>B. pendula</i> (156)	
<i>Betula lutea</i>	<i>B. pendula</i> (156)	
<i>Betula papyrifera</i>	<i>B. pendula</i> (156)	
CAMILLIA		
<i>Camillia japonica</i>	<i>C. reticulata</i> (238)	Delayed incompatibility
	<i>C.</i> unspecified (215)	
<i>Camillia reticulata</i>	<i>C. reticulata</i> (238)	
<i>Camillia saluenensis</i> x <i>C. japonica</i>	<i>C. reticulata</i> (238)	
CARAGANA		
<i>Caragana arborescens</i>	<i>C. arborescens pendula</i> (263)	
CARPINUS		
<i>Carpinus betulus</i>	<i>C. betulus</i> (97)	
<i>Carpinus caroliniana</i>	<i>C. betulus fastigiata</i> (74, 263)	
CARYA		
<i>Carya</i> unspecified	<i>C.</i> unspecified (97)	
<i>Juglans nigra</i>	<i>C.</i> unspecified (97)	
CASTANEA.		
<i>Castanea crenata</i> 'Gin-Yose'	<i>C. crenata</i> 'Gin-Yose' (4) <i>C. mollissima</i> 'Boji' (4)	Incompatible
<i>Castanea crenata</i> 'Shibaguri'	<i>C. crenata</i> 'Gin-Yose' (4) <i>C. mollissima</i> 'Boji' (4)	Incompatible
<i>Castanea mollissima</i>	<i>C.</i> unspecified (97)	
<i>Castanea mollissima</i> 'Miyagawa 20'	<i>C. crenata</i> 'Gin-Yose' (4), <i>C. mollissima</i> 'Boji' (4)	

ROOTSTOCK	SCION	REMARKS
<i>Castanea sativa</i>	<i>C. sativa</i> (194)	
<i>Castanea sativa</i> M15 (clonal)	<i>C. sativa</i> 'Boriche rouge' (194)	Delayed incompatibility
CATALPA		
<i>Catalpa speciosa</i>	<i>C. unspecified</i> (97)	
CEDRUS.		
<i>Cedrus atlantica</i>	<i>C. atlantica aurea</i> (263), <i>C. a. fastigiata</i> (263), <i>C. a. glauca</i> (263), <i>C. a. pendula</i> (263)	Weak Unions
<i>Cedrus deodara</i>	<i>C. atlantica</i> (215), <i>C. a aurea</i> (263), <i>C. a. fastigiata</i> (263), <i>C. a. glauca</i> (38, 57, 156, 263), <i>C. a. pendula</i> (263), <i>C. deodara aurea</i> (263), <i>C. d. pendula</i> (263), <i>C. libani</i> (40, 263)	
CELTIS		
<i>Celtis unspecified</i>	<i>C. unspecified</i> (97)	
CHAENOMELES.		
<i>Chaenomeles japonica</i>	<i>C. japonica</i> (71)	
<i>Sorbus aucuparia</i>	<i>C. japonica</i> (71)	50% take
<i>Sorbus unspecified</i>	<i>C. unspecified</i> (279)	
CHAMAECYPARIS.		
<i>Chamaecyparis lawsoniana</i>	<i>C. nootkatensis</i> (238)	Failed to unite
	<i>C. obtusa aurea nana</i> (40), <i>C. o. gracilis nana</i> (170), <i>C. o. 'Minima'</i> (40)	
<i>Chamaecyparis lawsoniana allumii</i>	<i>C. obtusa cruppsii</i> (131), <i>C. o. nana</i> (131), <i>C. o. n. compacta</i> (131)	
<i>Chamaecyparis obtusa</i>	<i>C. lawsoniana stewartii</i> (38), <i>C. obtusa aurea</i> (263), <i>C. o. compacta</i> (263), <i>C. o. cruppsii</i> (263), <i>C. o. filicoides</i> (263), <i>C. o. gracilis</i> (38, 263), <i>C. o. g. nana</i> (38, 263), <i>C. o. nana</i> (263), <i>C. o. tetragona</i> (263)	
<i>Chamaecyparis pisifera</i>	<i>C. obtusa aurea</i> (263), <i>C. o. a. nana</i> (40), <i>C. o. compacta</i> (263), <i>C. o. cruppsii</i> (263), <i>C. o. filicoides</i> (263), <i>C. o. gracilis</i> (263), <i>C. o. g. nana</i> (40, 263), <i>C. o. 'Minima'</i> (40), <i>C. o. nana</i> (263), <i>C. o. tetragona</i> (263)	
<i>Chamaecyparis pisifera plumosa</i>	<i>C. obtusa gracilis</i> (156), <i>C. o. g. nana</i> (156)	
<i>Chamaecyparis pisifera plumosa</i> (clonal)	<i>C. lawsoniana stewartii</i> (38), <i>C. obtusa gracilis</i> (38), <i>C. o. g. nana</i> (38), <i>C. o. lycopodioides</i> (40)	

ROOTSTOCK	SCION	REMARKS
<i>Juniperus chinensis</i> <i>hetzi glauca</i> (clonal)	<i>C. unspecified</i> (7)	
<i>Juniperus virginiana</i> (clonal)	<i>C. unspecified</i> (7)	
<i>Thuja occidentalis</i>	<i>C. obtusa aurea</i> (263), <i>C. o. compacta</i> (263), <i>C. o. cripplii</i> (263) <i>C. o. filicoides</i> (263), <i>C. o. gracilis</i> (263), <i>C. o. g. nana</i> (263), <i>C. o. nana</i> (263), <i>C. o. tetragona</i> (263)	
<i>Thuja orientalis</i>	<i>C. nootkatensis</i> 'Argenteovariegata' (23), <i>C. n. 'Aureovariegata'</i> (23), <i>C. n. compacta</i> (23), <i>C. n. glauca</i> (23), <i>C. n. pendula</i> (23) <i>C. obtusa aurea</i> (263), <i>C. o. compacta</i> (263), <i>C. o. cripplii</i> (263), <i>C. o. filicoides</i> (263), <i>C. o. gracilis</i> (263), <i>C. o. g. nana</i> (263), <i>C. o. tetragona</i> (263) <i>C. unspecified</i> (97, 267)	Unsatisfactory
<i>Thuja occidentalis</i> (clonal)	<i>C. unspecified</i> (7)	
CHIONANTHUS.		
<i>Chionanthus virginica</i>	<i>C. retusa</i> (74)	
<i>Fraxinus omus</i>	<i>C. unspecified</i> (97)	Not compatible
<i>Fraxinus velutina</i>	<i>C. virginica</i> (95)	Shields took, buds failed
<i>Fraxinus pennsylvanica</i>	<i>C. virginica</i> (277)	Shields took, died over winter
<i>Syringa persica alba</i>	<i>C. virginica</i> (277)	Shields took, buds failed
<i>Syringa villosa</i>	<i>C. virginica</i> (277)	
CITRUS		
<i>Citrus auranti-folium</i>	<i>C. sinensis</i> (197)	Stem-pit susceptible according to variety
	<i>C. sinensis</i> 'Shamouti' (206)	Stem-pit susceptible
<i>Citrus auranti-folium/Citrus aurantium</i>	<i>C. sinensis</i> 'Shamouti' (206)	Stem-pit susceptible
<i>Citrus auranti-folium/Citrus limon</i>	<i>C. sinensis</i> 'Shamouti' (206)	
<i>Citrus auranti-folium 'Rangpur'</i>	<i>C. limon</i> 'Lisbon' (110), <i>C. paradisi</i> 'Red Ruby' (47), <i>C. sinensis</i> 'Valencia' (47)	Tristeza blockage
<i>Citrus aurantium</i>	<i>C. aurantium</i> (83) <i>C. mitis</i> (83)	Incompatible, union crease, weak
	<i>C. paradisi</i> 'Red Ruby' (47) <i>C. sinensis</i> (83)	Tristeza blockage

ROOTSTOCK	SCION	REMARKS
	<i>C. sinensis</i> 'Shamouti' (206), <i>C. sinensis</i> 'Valencia' (47)	
<i>Citrus aurantium</i> 'Oklawaha'	<i>C. limon</i> 'Lisbon' (110)	
<i>Citrus aurantium</i> / <i>Citrus auranti-</i> <i>folium</i>	<i>C. sinensis</i> 'Shamouti' (206)	
<i>Citrus aurantium</i> / <i>Citrus limon</i>	<i>C. sinensis</i> 'Shamouti' (206)	
<i>Citrus crenatifolia</i> <i>Lycopersiciformis</i> 'Heennaran'	<i>C. sinensis</i> 'Liyangola' (1), <i>C. s.</i> 'Valencia' (1)	
<i>Citrus grandis</i> 'Hogen'	<i>C. unspecified</i> (282)	
<i>Citrus intermedia</i>	<i>C. unspecified</i> (282)	
<i>Citrus jambhiri</i>	<i>C. mitis</i> (83), <i>C. paradisi</i> Red Ruby' (47), <i>C. reticulata</i> 'Hill' (227), <i>C. r.</i> 'Sringar' (226), <i>C.</i> <i>s.</i> 'Valencia' (47, 195), <i>C. s.</i> <i>unspecified</i> (169), <i>C. unspeci-</i> <i>fied</i> (195, 215, 247)	
<i>Citrus junos</i>	<i>C. unspecified</i> (19, 282)	
<i>Citrus kama</i>	<i>C. sinensis</i> 'Vanilla' (228)	
<i>Citrus leiocarpa</i>	<i>C. unspecified</i> (282)	
<i>Citrus limon</i>	<i>C. limon</i> 'Lisbon' (110), <i>C. sinen-</i> <i>sis</i> (83)	
	<i>C. sinensis</i> 'Blood Red' (44)	Up to 90% union crease
	<i>C. sinensis</i> 'Hamlin' (44), <i>H. s.</i> 'Jaffa' (44)	
	<i>C. sinensis</i> 'Muscambi' (44)	Up to 90% union crease
	<i>C. sinensis</i> 'Shamouti' (206)	Stem-pit susceptible
	<i>C. sinensis</i> 'Valencia Late' (44)	
<i>Citrus limon</i> / <i>Citrus</i> <i>aurantifolia</i>	<i>C. sinensis</i> 'Shamouti' (206)	Stem-pit susceptible
<i>Citrus limon</i> / <i>Citrus</i> <i>aurantium</i>	<i>C. sinensis</i> 'Shamouti' (206)	Short-lived
<i>Citrus mitis</i>	<i>C. aurantium</i> (83)	Incompatible
	<i>C. jambhiri</i> (83)	
	<i>C. paradisi</i> (83)	Incompatible
	<i>C. reticulata</i> (83)	Most varieties incom- patible
	<i>C. sinensis</i> (83)	Incompatible
	<i>C. sinensis</i> x <i>Poncirus tri-</i> <i>foliata</i> 'Citrange Morton' (83)	
	<i>C. sinensis</i> x <i>Poncirus tri-</i> <i>foliata</i> 'Citrange Troyer' (83)	Incompatible
<i>Citrus natsudaidai</i>	<i>C. unspecified</i> (19, 282)	
<i>Citrus paradisi</i>	<i>C. mitis</i> (83)	Incompatible, union crease, weak
	<i>C. unspecified</i> (247)	
<i>Citrus reticulata</i>	<i>C. mitis</i> (83)	Incompatible, union crease, varieties weak on most

ROOTSTOCK	SCION	REMARKS
<i>Citrus reticulata</i> 'Cleopatra'	<i>C. paradisi</i> 'Red Ruby' (47), <i>C. sinensis</i> 'Valencia' (47, 258), <i>C. s.</i> 'Washington Navel' (258), <i>C. s.</i> unspecified (169, 195)	
<i>Citrus reticulata</i> 'Emperor'	<i>C. sinensis</i> 'Valencia' (258), <i>C.</i> <i>s.</i> 'Washington Navel' (258)	
<i>Citrus reticulata</i> 'Empress'	<i>C. sinensis</i> unspecified (161)	
<i>Citrus reticulata</i> 'Wilking'	<i>C. limon</i> 'Lisbon' (110)	
<i>Citrus sinensis</i>	<i>C. limon</i> (83) <i>C. mitis</i> (83) <i>C. sinensis</i> unspecified (169), <i>C.</i> unspecified (195, 247)	Incompatible, union crease, weak
<i>Citrus sinensis</i> 'Caipira'	<i>C. sinensis</i> 'Liyangola' (1), <i>C. s.</i> 'Valencia' (1)	
<i>Citrus sinensis</i> 'Koethen'	<i>C. limon</i> 'Lisbon' (110)	
<i>Citrus sinensis</i> 'Liyangola'	<i>C. sinensis</i> 'Liyangola' (1), <i>C. s.</i> 'Valencia' (1)	
<i>Citrus sinensis</i> 'Omanthal'	<i>C. sinensis</i> 'Liyangola' (1), <i>C. s.</i> 'Valencia' (1)	
<i>Citrus sinensis</i> 'Parson Brown'	<i>C. paradisi</i> 'Red Ruby' (47), <i>C. sinensis</i> 'Valencia' (47)	
<i>Citrus sinensis</i> / <i>Citrus sinensis</i> x <i>Poncirus trifoli-</i> <i>ata</i> 'Citrange Troyer'	<i>C. limon</i> 'Eureka' (83)	
<i>Citrus sinensis</i> x <i>Poncirus trifoli-</i> <i>ata</i> 'Citrange Carrizo'	<i>C. sinensis</i> 'Valencia' (258), <i>C. s.</i> 'Washington Navel' (258), <i>C. s.</i> unspecified (169), <i>C.</i> unspecified (247)	
<i>Citrus sinensis</i> x <i>Poncirus trifoli-</i> <i>ata</i> 'Citrange Morton'	<i>C. mitis</i> (83)	
<i>Citrus sinensis</i> x <i>Poncirus trifoli-</i> <i>ata</i> 'Citrange Troyer'	<i>C. limon</i> 'Eureka' (83) <i>C. limon</i> 'Lisbon' (83, 110) <i>C. mitis</i> (83) <i>C. sinensis</i> 'Valencia' (258), <i>C. s.</i> 'Washington Navel' (258), <i>C. s.</i> unspecified (83, 169), <i>C. un-</i> specified (247)	Incompatible Incompatible
<i>Citrus sunki</i>	<i>C.</i> unspecified (281)	Commonly used in Taiwan
<i>Citrus volkamericana</i> 'Acereale' (Clonal)	<i>C.</i> unspecified (203)	
<i>Citrus volkamericana</i> 'Catalina' (Clonal)	<i>C.</i> unspecified (203, 247)	
<i>Citrus volkamericana</i> 'Napolı' (Clonal)	<i>C.</i> unspecified (203)	

ROOTSTOCK	SCION	REMARKS
<i>Citrus</i> unspecified 'Italian 76'	<i>C. reticulata</i> 'Hill' (227), <i>C. r.</i> 'Sringar' (226) <i>C. sinensis</i> 'Mosambi' (225)	
<i>Citrus</i> unspecified 'Nasarin'	<i>C. reticulata</i> 'Sangtra' (229), <i>C. sinensis</i> 'Malta' (229)	
<i>Fortunella</i> <i>margarita</i>	<i>C. mitis</i> (83)	
<i>Poncirus trifoliata</i>	<i>C. limon</i> 'Eureka' (83), <i>C. l.</i> 'Lisbon' (83) <i>C. mitis</i> (83), <i>C. paradisi</i> 'Red Ruby' (47), <i>C. sinensis</i> (83), <i>C. s.</i> 'Valencia' (47, 258), <i>C. s.</i> 'Vanilla' (228), <i>C. s.</i> 'Washington Navel' (258), <i>C. s.</i> unspecified (169), <i>C.</i> unspecified (19, 195, 215, 282)	Incompatible, green deposits
<i>Poncirus trifoliata</i> x <i>Citrus limon</i> 'Citrimon 1449'	<i>C. sinensis</i> unspecified (169)	
<i>Poncirus trifoliata</i> x <i>Citrus pumelo</i> 'Citrumelo Sacaton'	<i>C. limon</i> 'Lisbon' (110)	
<i>Poncirus trifoliata</i> x <i>Citrus pumelo</i> 'Citremelo 1974'	<i>C. sinensis</i> unspecified (169)	
Unspecified 'Citronelle'	<i>C. sinensis</i> 'Valencia' (258), <i>C. s.</i> 'Washington Navel' (258)	
CLEMATIS		
<i>Clematis vitalba</i>	<i>C.</i> unspecified (97)	
COLUTEA		
<i>Caragana</i> <i>arborescens</i>	<i>C.</i> unspecified (97)	
<i>Colutea</i> unspecified	<i>C.</i> unspecified (97)	
CORNUS		
<i>Cornus florida</i>	<i>C. florida</i> (156), <i>C. f. pendula</i> (263), <i>C. f. plena</i> (263), <i>C. f.</i> <i>rubra</i> (15, 38, 263), <i>C. f.</i> <i>salicifolia</i> (263), <i>C. f. welchi</i> (156, 263), <i>C. f. xanthocarpa</i> (263), <i>C. f.</i> unspecified culti- vars (97, 185, 217), <i>C. kousa</i> (156), <i>C. k. chinensis</i> (263)	
<i>Cornus</i> <i>stolonifera</i>	<i>C. florida</i> (277)	Couldn't get callus formation
CORYLOPSIS:		
<i>Corylopsis spicata</i>	<i>C.</i> unspecified (97)	
<i>Hamamelis</i> unspecified	<i>C.</i> unspecified (97)	
COTONEASTER		
<i>Cotoneaster</i> <i>acutifolia</i>	<i>C.</i> unspecified (97)	

ROOTSTOCK	SCION	REMARKS
<i>Cotoneaster bullata</i>	<i>C. unspecified</i> (97)	
<i>Cotoneaster dielsiana</i>	<i>C. unspecified</i> (97)	
<i>Crataegus phaenopyrum</i>	<i>C. adpressa praecox</i> (211)	
<i>Crataegus unspecified</i>	<i>C. unspecified</i> (97, 279)	
<i>Malus pumila</i>	<i>C. multiflora</i> (185)	
<i>Pyrus communis</i> 'Bartlett'	<i>C. congesta</i> (7), <i>C. horizontalis perpusilla</i> (7)	
<i>Sorbus aucuparia</i>	<i>C. adpressa praecox</i> (263), <i>C. henryana</i> (263)	
<i>Sorbus aucuparia/ Crataegus oxyacantha</i>	<i>C. franchetti</i> (194)	Good, but low take with other <i>Cotoneaster</i>
<i>Sorbus unspecified</i>	<i>C. adpressa</i> (185), <i>C. unspecified</i> (97)	
CRATAEGUS		
<i>Crataegus crus-galli</i>	<i>C. lavalleyi</i> (185, 224) <i>C. monogyna stricta inermis</i> 'Hooks' (224) <i>C. viridis</i> 'Winter King' (185, 224)	Lack of strong union
<i>Crataegus monogyna</i>	<i>C. monogyna</i> (179), <i>C. m. biflora</i> (179), <i>C. m. pendula</i> (179), <i>C. m. stricta</i> (179), <i>C. oxyacantha</i> (179), <i>C. o. pauli</i> (179), <i>C. o. plena</i> (179), <i>C. o. rosea</i> (179), <i>C. unspecified</i> (97)	
<i>Crataegus oxyacantha</i>	<i>C. crus-galli</i> (156), <i>C. lavalleyi</i> (194), <i>C. monogyna</i> (179), <i>C. m. biflora</i> (179), <i>C. m. pendula</i> (179), <i>C. m. stricta</i> (179), <i>C. oxyacantha</i> (156, 179), <i>C. o. pauli</i> (97, 179, 194), <i>C. o. plena</i> (179, 194), <i>C. o. rosea</i> (179, 194), <i>C. phaenopyrum</i> (156, 179), <i>C. unspecified</i> (178)	
<i>Crataegus phaenopyrum</i>	<i>C. amoldiana</i> (179), <i>C. calpodendron</i> (179), <i>C. crus-galli</i> (179, 185), <i>C. c. inermis</i> (179), <i>C. douglasii</i> (179), <i>C. intricata</i> (179), <i>C. lavalleyi</i> (179), <i>C. macroacantha</i> (179), <i>C. mollis</i> (179), <i>C. mordenensis</i> 'Toba' (179, 185) <i>C. oxyacantha pauli</i> (178) <i>C. phaenopyrum fastigiata</i> (179), <i>C. prunifolia</i> (179), <i>C. punctata</i> (179), <i>C. viridis</i> 'Winter King' (156, 179)	Considerable mortality
<i>Crataegus unspecified</i>	<i>C. crus-galli</i> (185)	Some delayed incompatibility
<i>Malus adstringens</i> 'Alberta'	<i>C. mordenensis</i> 'Toba' (56)	Weak union, delayed incompatibility
<i>Malus adstringens</i> 'Columbia'	<i>C. mordenensis</i> 'Toba' (56)	Weak union, delayed incompatibility

ROOTSTOCK	SCION	REMARKS
<i>Malus pumila</i> unspecified	<i>C. crus-galli</i> (185)	
<i>Pyrus communis</i> 'Golden Spice'	<i>C. mordenensis</i> 'Toba' (56)	Weak union, delayed incompatibility
CRYPTOMERIA		
<i>Cryptomeria</i> <i>japonica</i>	<i>C. japonica libbii</i> (38), <i>C. un-</i> <i>specified</i> (97)	
CUPRESSOCYPARIS		
<i>Thuja orientalis</i>	<i>C. leylandi</i> (267)	
CUPRESSUS		
<i>Cupressus</i> <i>arizonica</i>	<i>C. arizonica</i> (215)	
<i>Juniperus chinensis</i> <i>hetzi glauca</i>	<i>C. arizonica</i> (279)	
<i>Juniperus scopu-</i> <i>lorum</i> 'Blue Heaven'	<i>C. arizonica</i> (279)	
<i>Thuja orientalis</i>	<i>C. arizonica</i> (279)	
<i>Thuja</i> unspecified	<i>C. arizonica</i> (267)	
CYDONIA		
<i>Cydonia oblonga</i>	<i>C. unspecified</i> (97)	
<i>Cydonia oblonga</i> 'Mosna' (clonal)	<i>C. oblonga</i> 'Champion' (198)	
<i>Cydonia oblonga</i> 'Mosna'	<i>C. oblonga</i> 'Champion' (198)	
<i>Cydonia oblonga</i> 'Provence' (clonal)	<i>C. oblonga</i> 'Champion' (97), <i>C. o.</i> 'Vranja' (97), <i>C. o.</i> 'Portugal' (97)	
<i>Cydonia oblonga</i> 'Quince A' (clonal)	<i>C. oblonga</i> 'Champion' (198)	
<i>Cydonia oblonga</i> 'Quince C' (clonal)	<i>C. oblonga</i> 'Champion' (198)	
<i>Malus pumila</i>	<i>C. unspecified</i> (97)	
<i>Pyrus communis</i>	<i>C. unspecified</i> (197)	Poor bud take and weak growth
CYTISUS		
<i>Cytisus nigricans</i>	<i>C. unspecified</i> (97)	
<i>Cytisus scoparius</i>	<i>C. unspecified</i> (97)	
<i>Laburnum</i> unspecified	<i>C. unspecified</i> (116)	Swollen poor unions
DAPHNE		
<i>Daphne laureola</i>	<i>D. unspecified</i> (97)	
DAVIDIA		
<i>Nyssa</i> unspecified	<i>D. unspecified</i> (97)	
DIOSPYROS		
<i>Diospyros lotus</i>	<i>D. kaki</i> (239) <i>D. kaki</i> 'Hiakume' (88), <i>D.</i> <i>unspecified</i> 'Fuyo', 'Giambo', 'Hachiya', 'Hana- fuyu', 'Jiro' and 'Tanesashi' (219), <i>D. unspecified</i> (84, 97)	Dwarfed

ROOTSTOCK	SCION	REMARKS
<i>Diospyros virginiana</i>	<i>D. unspecified</i> 'Fuyo', 'Giambo', 'Hachiya', 'Hanafuyu', 'Jiro' and 'Tanesashi' (219), <i>D. unspecified</i> (84, 97)	
ELAEAGNUS:		
<i>Elaeagnus multiflora</i>	<i>E. unspecified</i> (97)	
<i>Elaeagnus pungens</i>	<i>E. unspecified</i> (97)	
ERIOBOTRYA.		
<i>Eriobotrya japonica</i>	<i>E. deflexa</i> (7, 214), <i>E. japonica</i> (215), <i>E. j.</i> 'Gold Nugget' (7)	
EUONYMUS.		
<i>Celastrus scandens</i>	<i>E. alatus</i> (277), <i>E. a. compactus</i> (277)	No take
<i>Euonymus europaeus</i>	<i>E. fortunei vegatus</i> (140, 142, 185), <i>E. odoratus</i> (142), <i>E. unspecified</i> 'Gaity' (142), <i>E. unspecified</i> (97)	
<i>Euonymus turkistanicus</i>	<i>E. alatus</i> (277), <i>E. a. compactus</i> (277), <i>E. europaeus</i> (277)	Seemed to take and then died
EVODIA:		
<i>Phellodendron unspecified</i>	<i>E. unspecified</i> (97)	
FAGUS:		
<i>Fagus grandiflora</i>	<i>F. sylvatica asphenifolia</i> (263), <i>F. s. fastigiata</i> (263), <i>F. s. heterophylla</i> (263), <i>F. s. pendula</i> (156, 263), <i>F. s. purpurea</i> (263), <i>F. s. p. pendula</i> (263), <i>F. s. riversii</i> (263), <i>F. s. rotundifolia</i> (263), <i>F. s. 'Tricolor'</i> (263)	
<i>Fagus sylvatica</i>	<i>F. sylvatica</i> (156), <i>F. s. asphenifolia</i> (263), <i>F. s. atropunicea</i> (57, 106), <i>F. s. fastigiata</i> (156, 263), <i>F. s. 'Globe Form'</i> (74), <i>F. s. heterophylla</i> (263), <i>F. s. lacinata</i> (156), <i>F. s. pendula</i> (38, 263), <i>F. s. purpurea</i> (263), <i>F. s. p. pendula</i> (156, 263), <i>F. s. riversii</i> (38, 156, 263), <i>F. s. rotundifolia</i> (263), <i>F. s. 'Tricolor'</i> (263) <i>F. sylvatica clones</i> (185)	Sometimes large knot at graft that breaks easily
<i>Quercus palustris</i>	<i>F. sylvatica</i> (277)	Knitted buds died, difficult to work
FEIJOA.		
<i>Feijoa sellowiana</i>	<i>F. sellowiana</i> 'Pineapple Gem' (7)	
FORSYTHIA:		
<i>Forsythia x 'Arnold's Dwarf'</i>	<i>F. suspensa</i> (277)	Apparent take, no survival after winter

ROOTSTOCK	SCION	REMARKS
<i>Forsythia viridissima</i>	<i>F. viridissima koreana</i> (277)	No take
<i>Forsythia viridissima bronxensis</i>	<i>F. suspensa</i> (277)	No take
FORTUNELLA.		
<i>Citrus mitis</i>	<i>F. margarita</i> (83)	
<i>Poncirus trifoliata</i>	<i>F. margarita</i> (248)	
<i>Poncirus trifoliata</i> x <i>Citrus sinensis</i> 'Citrange Troyer'	<i>F. margarita</i> (248)	
FRAXINUS:		
<i>Chionanthus virginica</i>	<i>F. pennsylvanica</i> (277)	Shields took, buds failed
<i>Fraxinus excelsior</i>	<i>F. angustifolia</i> (116)	Rough unions
<i>Fraxinus pennsylvanica</i>	<i>F. excelsior</i> (185), <i>F. pennsylvanica</i> 'Marshall Seedless' (7, 186), <i>F. unspecified</i> 'Autumn Purple' (185)	
<i>Fraxinus pennsylvanica subintegra</i>	<i>F. holotricha</i> 'Moraine' (185)	
<i>Fraxinus uhdei</i>	<i>F. uhdei</i> (215), <i>F. u.</i> 'Sexton' (95), <i>F. velutina</i> 'Modesto' (95), <i>F. unspecified</i> 'Majestic Beauty' (7)	
<i>Fraxinus unspecified</i>	<i>F. excelsior compacta</i> (142), <i>F. e. globosa</i> (142), <i>F. e. jaspidea</i> (142), <i>F. e. pendula</i> (142)	
<i>Syringa persica alba</i>	<i>F. pennsylvanica</i> (277)	Shields took, buds failed
<i>Syringa villosa</i>	<i>F. pennsylvanica</i> (277)	Shields took, buds failed or shoot overgrew and failed
GENISTA:		
<i>Genista tinctoria</i>	<i>G. unspecified</i> (97)	
GINKGO:		
<i>Ginkgo biloba</i>	<i>G. biloba</i> (142, 263), <i>G. b. fastigiata</i> (142, 263), <i>G. b. f.</i> 'Mayfield' (142), <i>G. b. f.</i> 'October Gold' (142)	
GLEDITSIA:		
<i>Gleditsia triacanthos</i>	<i>G. triacanthos</i> clones (185), <i>G. unspecified</i> (97)	
HALIMODENDRON.		
<i>Caragana arborescens</i>	<i>H. purpurea</i> (97)	
HAMAMELIS:		
<i>Hamamelis japonica</i>	<i>H. japonica flavo-purpurescens</i> (263), <i>H. j. zuccariniana</i> (263), <i>H. mollis</i> (263)	

ROOTSTOCK	SCION	REMARKS
<i>Hamamelis virginiana</i>	<i>H. japonica flavo-purpurescens</i> (263), <i>H. j. zuccariniana</i> (263), <i>H. mollis</i> (74, 263), <i>H. unspecified</i> (97)	
HEDERA:		
<i>Fatsyhedera lizei</i> (clonal)	<i>H. helix</i> (7, 215)	
<i>Hedera helix</i>	<i>H. helix</i> (97)	
HIBISCUS:		
<i>Hibiscus unspecified</i>	<i>H. unspecified</i> (97)	
HIPPOPHAE.		
<i>Elaeagnus angustifolia</i>	<i>H. rhamnoides</i> (68)	Few took, but were lost
<i>Shepherdia argentea</i>	<i>H. rhamnoides</i> (68)	Incompatible
HYDRANGEA:		
<i>Hydrangea arborescens</i>	<i>H. paniculata grandiflora</i> (38)	
ILEX:		
<i>Ilex altaclarensis</i>	<i>I. altaclarensis</i> (162)	Best on own species
<i>Ilex aquifolium</i>	<i>I. opaca</i> (162, 263)	Stock outgrows scion
<i>Ilex cassine</i>	<i>I. cassine</i> (162)	Best on own species
<i>Ilex comuta</i>	<i>I. comuta</i> (162)	Best on own species
<i>Ilex opaca</i>	<i>I. aquifolium</i> (162), <i>I. opaca</i> (263)	
<i>Ilex opaca</i> (clonal)	<i>I. aquifolium</i> (156), <i>I. opaca</i> (156)	
<i>Ilex pedunculosa</i>	<i>I. pedunculosa</i> (162)	Best on own species
<i>Ilex pemyi</i>	<i>I. pemyi</i> (162)	Best on own species
<i>Ilex vomitoria</i>	<i>I. vomitoria</i> (162)	Best on own species
JUGLANS:		
<i>Juglans nigra</i>	<i>J. nigra</i> (61), <i>J. n.</i> 'Horton' (76), <i>J. n.</i> 'Meyers' (76), <i>J. n.</i> 'Sparrow' (76), <i>J. n.</i> 'Thomas' (76), <i>J. regia</i> (Carpathian varieties) (61)	
<i>Juglans regia</i>	<i>J. unspecified</i> 'Esterhazy 1' and 'Esterhazy 2' (28) <i>J. unspecified</i> 'Franguette' and 'Mayette' (28)	Less satisfactory than Franguette and Mayette
JUNIPERUS:		
<i>Juniperus chinensis</i>	<i>J. chinensis</i> 'Columnaris' (41), <i>J. c.</i> 'Keteleeri' (41), <i>J. c. unspecified</i> (184), <i>J. scopulorum unspecified</i> (184), <i>J. virginiana</i> 'Burki' (41), <i>J. v.</i> 'Canaerti' (41), <i>J. v.</i> 'Dundee', (41), <i>J. v. unspecified</i> (184)	
	<i>J. virginiana</i> cultivars (112)	Growth inhibition
	<i>J. unspecified</i> (111)	
<i>Juniperus chinensis hetzi glauca</i>	<i>J. chinensis</i> 'Blaauw' (38), <i>J. c. hetzi</i> 'Columnaris' (131), <i>J. c.</i> 'Keteleeri' (38), <i>J. c. pfitzeriana</i> (38), <i>J. c. p. glauca</i>	

ROOTSTOCK	SCION	REMARKS
	(38), <i>J. c.</i> 'Sargentii' (38, 185), <i>J. c.</i> unspecified (141, 156, 184, 185, 263), <i>J. communis</i> (141), <i>J. sabina</i> (185)	
	<i>J. sabina</i> 'Broadmoor' (256)	Poor compatibility
	<i>J. scopulorum</i> 'Blue Heaven' (38), <i>J. s.</i> unspecified (141, 184, 264), <i>J. squamata</i> (141) <i>J. s.</i> 'Meyeri' (38), <i>J. virginiana</i> un- specified (141, 184, 263)	
	<i>J. virginiana cupressifolia</i> (185)	Poor take
	<i>J.</i> unspecified (7, 75, 107, 215)	
<i>Juniperus communis depressa</i> (clonal)	<i>J. chinensis</i> unspecified (156)	
<i>Juniperus communis hibernica</i>	<i>J. chinensis</i> 'Columnaris' (41), <i>J. c.</i> 'Keteleeri' (41), <i>J. virginiana</i> 'Burki' (41), <i>J. v.</i> 'Canaerti' (41), <i>J. v.</i> 'Dundee' (41)	Progressive losses
<i>Juniperus excelsior stricta</i>	<i>J. chinensis</i> 'Columnaris' (41), <i>J.</i> <i>c.</i> 'Keteleeri' (41)	Poor top growth
	<i>J. chinensis</i> 'Keteleeri' (51)	
	<i>J. virginiana</i> 'Burki' (41), <i>J. v.</i> 'Canaerti' (41)	Poor top growth
	<i>J. virginiana</i> 'Canaerti' (51)	
	<i>J. virginiana</i> 'Dundee' (41)	Poor top growth
	<i>J. virginiana glauca</i> (51)	
	<i>J. virginiana</i> unspecified (111)	Delayed incompatibility
<i>Juniperus horizontalis plumosa</i>	<i>J. chinensis</i> 'Columnaris' (41)	Dwarfing
	<i>J. chinensis</i> 'Keteleeri' (41), <i>J. c.</i> unspecified (263), <i>J. virginiana</i> 'Burki' (41), <i>J. v.</i> 'Canaerti' (41), <i>J. v.</i> 'Dundee' (41), <i>J. v.</i> un- specified (263)	
	<i>J.</i> unspecified (111)	Poor growth
<i>Juniperus (scopulorum?) pseudocupressus</i>	<i>J. chinensis</i> clones (64), <i>J. c.</i> 'Blaauw' (63, 141), <i>J. c.</i> 'Fairview' (63), <i>J. c. japonica</i> (141), <i>J. c.</i> 'Keteleeri' (63, 141), <i>J. c.</i> 'Mountbatten' (63), <i>J. c.</i> 'Olympia' (63), <i>J. c.</i> <i>pfitzeriana</i> 'Armstrong' (141), <i>J. c. p. compacta</i> (141), <i>J. c.</i> <i>sargentii glauca</i> (141), <i>J. com-</i> <i>munis</i> clones (64), <i>J. c. de-</i> <i>pressa nana aurea</i> (141), <i>J. c.</i> 'Pencil Point' (141), <i>J. sabina</i> <i>tamariscifolia</i> (141), <i>J. scopu-</i> <i>lorum</i> clones (64), <i>J. s.</i> 'Hills Silver' (63, 141), <i>J. s.</i> 'Moon- light' (141), <i>J. s.</i> 'North Star' (141), <i>J. squamata</i> 'Meyeri' (141), <i>J. virginiana</i> 'Blue Mountain' (63), <i>J. v.</i> 'Burki' (63),	
	<i>J. virginiana</i> 'Burki' (141), <i>J. v.</i> 'Canaerti' (63, 141), <i>J. v.</i> <i>glauca</i> (141)	Poor growth and death

ROOTSTOCK	SCION	REMARKS
	<i>J. virginiana</i> 'Hills Dundee' (63, 141), <i>J. v.</i> 'Nova' (141), <i>J. v. pyramidalis</i> (63, 141), <i>J. v.</i> 'Sky Rocket' (63, 141)	
<i>Juniperus virginiana</i>	<i>J. chinensis</i> 'Blaauw' (38, 156), <i>J. c.</i> 'Columnaris' (41), <i>J. c. hetzi</i> 'Columnaris' (131), <i>J. c.</i> 'Keteleeri' (38, 41), <i>J. c. pfitzeriana</i> (38), <i>J. c. p. glauca</i> (38), <i>J. c. procumbens</i> (185), <i>J. c.</i> 'Sargentii' (38), <i>J. c.</i> unspecified (184, 185, 263), <i>J. communis</i> clones (185), <i>J. depeana pachyphoea</i> (267), <i>J. scopulorum</i> 'Blue Heaven' (38), <i>J. s.</i> unspecified (64, 184, 267), <i>J. squamata</i> 'Meyeri' (267), <i>J. utahensis</i> (267), <i>J. virginiana</i> 'Burki' (41), <i>J. v.</i> 'Canaerti' (41), <i>J. v. cupressifolia</i> (185), <i>J. v.</i> 'Dundee' (41), <i>J. v.</i> unspecified (184, 185, 263, 267), <i>J.</i> unspecified 'Ashei' (267), <i>J.</i> unspecified 'San Jose' (38, 156), <i>J.</i> unspecified (7, 75, 107, 111, 215)	
<i>Thuja orientalis</i>	<i>J. chinensis</i> 'Columnaris' (41), <i>J. c.</i> 'Keteleeri' (41)	Progressive losses
	<i>J. chinensis</i> unspecified (267), <i>J. communis</i> (267), <i>J. scopulorum</i> unspecified (267)	
	<i>J. virginiana</i> 'Burki' (41), <i>J. v.</i> 'Canaerti' (41), <i>J. v.</i> 'Dundee' (41)	Progressive losses
	<i>J. virginiana</i> varieties (263) <i>J.</i> unspecified (7)	Delayed incompatibility
KERRIA.		
<i>Rhodotypos tetrapetala</i>	<i>K. japonica</i> (277)	No take
KOELREUTIA:		
<i>Koelreutia paniculata</i>	<i>K. paniculata fastigiata</i> (263)	
KOLKWITZIA		
<i>Viburnum dentatum</i>	<i>K. amabilis</i> (277)	No take, difficult to work
LABURNUM		
<i>Laburnum anagyroides</i>	<i>L. anagyroides vossii</i> (263)	
<i>Laburnum vulgare</i>	<i>L. alpinum</i> (156)	
LARIX		
<i>Larix</i> unspecified	<i>L. decidua</i> (156)	
LIGUSTRUM.		
<i>Ligustrum densiflora nana</i>	<i>L. amurense</i> (277)	No take, difficult to work

ROOTSTOCK	SCION	REMARKS
<i>Ligustrum ovalifolium</i>	<i>L. ovalifolium aureum</i> (194), <i>L. sinense</i> (194)	
LIQUIDAMBAR		
<i>Liquidambar formosana</i>	<i>L. formosana</i> 'Afterglow' (7)	
<i>Liquidambar styraciflua</i>	<i>L. formosana</i> (215), <i>L. styraciflua</i> (7, 215)	
LONICERA		
<i>Lonicera japonica</i> <i>Halliana</i> (clonal)	<i>L. hildebrandiana</i> (7, 215)	
<i>Lonicera tatarica</i>	<i>L. coerulea edulis</i> (56)	No take
MAACKIA		
<i>Sophora japonica</i>	<i>M. amurensis</i> (277)	Failed during first summer
MAGNOLIA		
<i>Magnolia acuminata</i>	<i>M. cordata</i> (105)	
	<i>M. soulangeana alba</i> (263), <i>M. s. alexandrina</i> (263), <i>M. s. lensei</i> (263), <i>M. s. nigra</i> (263), <i>M. s. norbertiana</i> (263), <i>M. s. 'Royal Star'</i> (263), <i>M. s. rustica rubra</i> (263), <i>M. s. speciosa</i> (263), <i>M. s. spectabilis</i> (263), <i>M. s. superba</i> (263), <i>M. stellata rosea</i> (263), <i>M. s. 'Waterlily'</i> (263) <i>M. unspecified, American and Oriental varieties</i> (105), <i>M. unspecified</i> (97)	Delayed incompatibility
<i>Magnolia grandiflora</i>	<i>M. grandiflora</i> (215), <i>M. g. 'Majestic Beauty'</i> (7), <i>M. g. 'St. Mary'</i> (7)	
<i>Magnolia kobus</i>	<i>M. cordata</i> (74, 116), <i>M. kobus borealis</i> (74), <i>M. salicifolia</i> (116), <i>M. sieboldii</i> (74), <i>M. soulangeana</i> (156), <i>M. s. alba</i> (263), <i>M. s. alexandrina</i> (263), <i>M. s. lensei</i> (263), <i>M. s. nigra</i> (263), <i>M. s. norbertiana</i> (263), <i>M. s. 'Royal Star'</i> (263), <i>M. s. rustica rubra</i> (263), <i>M. s. speciosa</i> (263), <i>M. s. spectabilis</i> (263), <i>M. s. superba</i> (263), <i>M. stellata</i> (156), <i>M. s. rosea</i> (263), <i>M. s. 'Waterlily'</i> (263), <i>M. unspecified, Oriental varieties</i> (105), <i>M. unspecified</i> (97)	
<i>Magnolia soulangeana</i>	<i>M. campbellii</i> (116), <i>M. sargentiana robusta</i> (116), <i>M. soulangeana</i> (116)	
<i>Magnolia tripetala</i>	<i>M. macrophylla</i> (116) <i>M. soulangeana alba</i> (263), <i>M. s. alexandrina</i> (263), <i>M. s. lensei</i> (263), <i>M. s. nigra</i> (263), <i>M. s. norbertiana</i> (263), <i>M. s. 'Royal Star'</i> (263), <i>M. s. rustica rubra</i> (263), <i>M. s. speciosa</i> (263), <i>M.</i>	Delayed incompatibility

ROOTSTOCK	SCION	REMARKS
	<i>s. spectabilis</i> (263), <i>M. s. superba</i> (263), <i>M. stellata rosea</i> (263), <i>M. s. 'Waterlily'</i> (263)	
MALUS.		
<i>Amelanchier alnifolia</i>	<i>M. adstringens</i> 'Trail' (56)	No take
<i>Amelanchier canadensis</i>	<i>M. pumila</i> 'Jonadel' (277), <i>M. p.</i> 'Red Delicious' (277) <i>M. adstringens</i> 'Trail' (56)	Shields knitted, buds failed Very low take, weak union
<i>Aronia melanocarpa</i>	<i>M. pumila</i> 'Jonadel' (277), <i>M. pumila</i> 'Red Delicious' (277)	Shields knitted, bud failed Weak unions
<i>Chaenomeles japonica</i>	<i>M. pumila</i> unspecified (71)	
<i>Cotoneaster acutifolia</i>	<i>M. pumila</i> 'Red Delicious' (277)	Buds took. Dead overwinter
<i>Cotoneaster divaricata</i>	<i>M. atrosanguinea</i> (193)	Very dwarfed, unions enlarged, survived 8-9 years
<i>Crataegus cordata</i>	<i>M. pumila</i> 'Red Delicious' (277)	Shield knitted, buds failed
<i>Crataegus crus-galli</i>	<i>M. pumila</i> 'Red Delicious' (277)	Shield knitted, buds failed
<i>Crataegus oxyacantha</i>	<i>M. pumila</i> 'Red Delicious' (277) <i>M. unspecified</i> (279)	Shield knitted, buds failed
<i>Crataegus unspecified</i>	<i>M. adstringens</i> 'Trail' (56)	Very low take, weak unions
<i>Cydonia oblonga</i> 'Quince B' / Unspecified	<i>M. pumila</i> 'Winter Banana' (67)	Incompatible
<i>Malus adstringens</i> 'Crab C' (clonal)	<i>M. pumila</i> 'Blenheim Orange' (82), <i>M. p.</i> 'Eichhoff Sdlg' (82)	
<i>Malus adstringens</i> 'Dolgo'	<i>M. unspecified</i> flowering crabapples (185)	
<i>Malus adstringens</i> 'French Crab'	<i>M. adstringens</i> 'Dolgo' (243) <i>M. purpurea lemoinei</i> (194) <i>M. sylvestris aldenhamensis</i> (194)	Very low take, virus suspected
<i>Malus adstringens</i> 'Garnet crab' / Unspecified	<i>M. pumila</i> 'McIntosh' (202)	
<i>Malus adstringens</i> 'Hopa'	<i>M. unspecified</i> flowering crabs (156), <i>M. unspecified</i> crabapples (185), <i>M. unspecified</i> (223)	
<i>Malus adstringens</i> 'Mecca x Dolgo' / Unspecified	<i>M. pumila</i> 'Gravenstein' (207), <i>M. p.</i> 'Ingrid Marie' (207), <i>M. p.</i> 'Linda' (207), <i>M. p.</i> 'Lobo' (207), <i>M. p.</i> 'Melba' (207), <i>M. p.</i> 'Patricia' (207), <i>M. p.</i> 'Wealthy' (207)	
<i>Malus adstringens</i> 'Osman'	<i>M. unspecified</i> (11)	

ROOTSTOCK	SCION	REMARKS
<i>Malus adstringens</i> 'Robin'/ Unspecified	<i>M. pumila</i> 'Cortland' (25), <i>M. p.</i> 'Delicious' (25), <i>M. p.</i> 'McIn- tosh' (25), <i>M. p.</i> 'Northern' Spy' (25)	Stem pit virus
<i>Malus adstringens</i> '0-524' (clonal)	<i>M. pumila</i> 'Cortland' (25), <i>M. p.</i> 'Delicious' (25), <i>M. p.</i> 'McIn- tosh' (25), <i>M. p.</i> 'Northern Spy' (25)	Incompatible
<i>Malus adstringens</i> '0-524'/ Unspecified	<i>M. pumila</i> 'Cortland' (25), <i>M. p.</i> 'Delicious' (25), <i>M. p.</i> 'McIn- tosh' (25), <i>M. p.</i> 'Northern Spy' (25)	Incompatible
<i>Malus baccata</i>	<i>M. pumila</i> 'Haralson' (103), <i>M. p.</i> 'Melba' (103)	Varied with seedling population
	<i>M. pumila</i> 'Patricia' (236)	Poor take
	<i>M. pumila</i> 'Red Delicious' (103)	Varied with seedling population
	<i>M. sargentii</i> (223), <i>M. x</i> 'Dorothea' (223), <i>M. x</i> 'Katherine' (223), <i>M.</i> unspecified flowering crab- apples (185), <i>M.</i> unspecified (159, 204)	
<i>Malus baccata</i> <i>gracilis</i> / Unspecified	<i>M. pumila</i> 'Cortland' (25), <i>M. p.</i> 'Delicious' (25), <i>M. p.</i> 'McIn- tosh' (25), <i>M. p.</i> 'Northern Spy' (25)	Incompatible
<i>Malus hupehensis</i>	<i>M.</i> unspecified (211)	Incompatible with many varieties
<i>Malus orientalis</i>	<i>M.</i> unspecified (175)	19.4 – 91.6% according to variety
<i>Malus pallasiana</i>	<i>M.</i> unspecified (105)	
<i>Malus prunifolia</i>	<i>M.</i> unspecified American vari- eties (97)	Some delayed incom- patibility
	<i>M.</i> unspecified (121)	Slow decline
	<i>M.</i> unspecified (204)	
<i>Malus prunifolia</i> 'Dab 97' (clonal)	<i>M.</i> unspecified (65)	
<i>Malus prunifolia</i> 'Dab 100' (clonal)	<i>M.</i> unspecified (65)	
<i>Malus prunifolia</i> 'Dab 192' (clonal)	<i>M.</i> unspecified (65)	
<i>Malus prunifolia</i> 'Dab 325' (clonal)	<i>M.</i> unspecified (65)	
<i>Malus pumila</i>	<i>M. ioensis</i> 'Virginia Crab' (202)	Brown line symptoms at union and eventual death
	<i>M. platycarpa</i> 'Rosedale' (285), <i>M. pumila</i> 'Echter Meyer' (253), <i>M. p. niedzwetzkyana</i> (285), <i>M. p.</i> 33 varieties listed (285), <i>M. p.</i> unspecified crabapples (185), <i>M. p.</i> unspecified (71), <i>M.</i> <i>sargentii</i> (142, 223, 285), <i>M.</i> <i>sieboldii</i> (285), <i>M. sikkimensis</i> (285), <i>M. s.</i> #33340 (285), <i>M.</i> <i>toringoides</i> (285), <i>M. x</i> 'Doro- thea' (223), <i>M. x</i> 'Katherine' (223)	

ROOTSTOCK	SCION	REMARKS
<i>Malus pumila</i> 'Alnarp A2 (clonal)	<i>M. unspecified</i> (123)	
<i>Malus pumila</i> Antonovka/ Unspecified	<i>M. pumila</i> 'McIntosh' (202)	
<i>Malus pumila</i> 'Anis'	<i>M. pumila</i> 'Fameuse' (149), <i>M. p.</i> 'McIntosh' (149)	
<i>Malus pumila</i> 'A24' (clonal)	<i>M. pumila</i> 'Blenheim Orange' (83), <i>M. p.</i> 'Eichhoff Sdlg' (82)	
<i>Malus pumila</i> 'Beautiful Arcade'	<i>M. pumila</i> 'Fameuse' (149), <i>M. p.</i> 'McIntosh' (149)	
<i>Malus pumila</i> 'Delicious'	<i>M. pumila</i> varieties with latent virus (275)	Severe stem pitting and bark necrosis in root
<i>Malus pumila</i> 'Delicious' and 'Jonathan' commercial sldgs.	<i>M. adstringens</i> 'Almey' (224), <i>M. x</i> 'Dorothea' (224), <i>M. x</i> 'Prairie Rose' (224)	Slight indication of incompatibility
<i>Malus pumila</i> 'E.M. I' (clonal)	<i>M. pumila</i> 'Fameuse' (149), <i>M. p.</i> 'Jonathan' (252), <i>M. p.</i> 'McIntosh' (149, 252), <i>M. p.</i> 'Red Delicious' (252), <i>M. p.</i> 'Northern Spy' (252), <i>M. unspecified</i> crabapples (185)	
<i>Malus pumila</i> 'E.M. II' (clonal)	<i>M. baccata</i> 'Jacki' (254) <i>M. purpurea lemoinei</i> (254) <i>M. pumila</i> 'Belle de Boskoop' (254) <i>M. pumila</i> 'Cox Orange' (280), <i>M. p.</i> 'Fameuse' (149), <i>M. p.</i> 'Jonathan' (252), <i>M. p.</i> 'McIntosh' (149, 252)	Complete failure virus No take Delayed incompatibility
	<i>M. p.</i> 'Nieulandiana' (254) <i>M. p.</i> 'Northern Spy' (252), <i>M. p.</i> 'Red Delicious' (252) <i>M. unspecified</i> crabapples (185) <i>M. unspecified</i> flowering crabapples (275)	Complete failure virus Some incompatibility Proved sensitive to virus
<i>Malus pumila</i> 'E.M. IV' (clonal)	<i>M. pumila</i> 'Belle de Boskoop' (12) <i>M. pumila</i> 'Blenheim Orange' (82), <i>M. p.</i> 'Eichhoff Sdlg' (82), <i>M. p.</i> 'Golden Delicious' (12, 90) <i>M. pumila</i> 'James Gieves' (249) <i>M. pumila</i> 'Jonathan' (1), <i>M. p.</i> 'McIntosh' (252), <i>M. p.</i> 'Red Delicious' (252), <i>M. p.</i> 'Northern Spy' (252)	Delayed incompatibility Incompatibility symptoms
	<i>M. unspecified</i> flowering crabapples (275)	Proved sensitive to virus
<i>Malus pumila</i> 'E.M. IV' / Wild apple	<i>M. pumila</i> 'Golden Delicious' (39), <i>M. p.</i> 'Jonathan' (39), <i>M. p.</i> 'Melba' (39), <i>M. p.</i> 'Red Astrachan' (39), <i>M. p.</i> 'Red Delicious' (39)	
<i>Malus pumila</i> 'E.M. V' (clonal)	<i>M. pumila</i> 'Jonathan' (252), <i>M. p.</i> 'McIntosh' (252), <i>M. p.</i> 'Red Delicious' (252), <i>M. p.</i> 'Northern Spy' (252)	

ROOTSTOCK	SCION	REMARKS
<i>Malus pumila</i> 'E.M. VII' (clonal)	<i>M. adstringens</i> 'Dolgo' (243), <i>M. baccata</i> (243) <i>M. ioensis</i> 'Betchel's Crab' (236) <i>M. pumila</i> 'Cox Orange' (280), <i>M. p.</i> 'Esopsus' (285), <i>M. p.</i> 'Jonathan' (252), <i>M. p.</i> 'July Red' (285), <i>M. p.</i> 'Mariborka' (285), <i>M. p.</i> 'McIntosh' (252), <i>M. p.</i> 'Mutsu' (285), <i>M. p.</i> 'Red Delicious' (252), <i>M. p.</i> 'Tydeman's Red' (285), <i>M. p.</i> 'Northern Spy' (252), <i>M. robusta</i> (243) <i>M. unspecified</i> flowering crabapples (275)	No take Proved sensitive to virus
<i>Malus pumila</i> 'E.M. VII'/ 'Wild Apple'	<i>M. pumila</i> 'Golden Delicious' (39), <i>M. p.</i> 'Jonathan' (39), <i>M. p.</i> 'Melba' (39), <i>M. p.</i> 'Red Astrachan' (39), <i>M. p.</i> 'Red Delicious' (39)	
<i>Malus pumila</i> 'E.M. VII'/ Unspecified	<i>M. pumila</i> 'Cortland' (25), <i>M. p.</i> 'Delicious' (25), <i>M. p.</i> 'McIntosh' (25), <i>M. p.</i> 'Northern Spy' (25)	
<i>Malus pumila</i> 'E.M. IX' (clonal)	<i>M. baccata</i> 'Jacki' (254) <i>M. pumila</i> 'Belle de Boskoop' (12) <i>M. pumila</i> 'Cox Orange' (280), <i>M. p.</i> 'Golden Delicious' (12, 24, 254) <i>M. pumila</i> 'Henrietta Crosby' (254) <i>M. pumila</i> 'Jonathan' (12), <i>M. p.</i> 'Redgold' (24), <i>M. p.</i> 'Red Yorking' (285), <i>M. p.</i> 'Richard' (24), <i>M. p.</i> 'Scarlet Staymared' (24), <i>M. p.</i> 'Stark Delicious' (24), <i>M. p.</i> 'Stark Jongrimes' (24), <i>M. p.</i> 'Starkrimson' (24), <i>M. p.</i> 'Triple Red Delicious' (285), <i>M. p.</i> unspecified (65) <i>M. unspecified</i> flowering crabapples (275) <i>M. unspecified</i> flowering crabapples (185)	Complete failure virus Delayed incompatibility Fair take but poor growth Proved sensitive to virus Some incompatibility
<i>Malus pumila</i> 'E.M. IX'/ Wild apple	<i>M. pumila</i> 'Golden Delicious' (39) <i>M. p.</i> 'Jonathan' (39), <i>M. p.</i> 'Melba' (39), <i>M. p.</i> 'Red Astrachan' (39), <i>M. p.</i> 'Red Delicious' (39)	
<i>Malus pumila</i> 'E.M. XII' (clonal)	<i>M. pumila</i> 'Fameuse' (149), <i>M. p.</i> 'McIntosh' (149)	
<i>Malus pumila</i> 'E.M. XIII' (clonal)	<i>M. pumila</i> 'James Grieves' (249) <i>M. pumila</i> 'Jonathan' (252), <i>M. p.</i> 'McIntosh' (252), <i>M. p.</i> 'Red Delicious' (252), <i>M. p.</i> 'Northern Spy' (252)	Incompatibility symptoms
<i>Malus pumila</i> 'E.M. XVI' (clonal)	<i>M. pumila</i> 'Blenheim Orange' (82), <i>M. p.</i> 'Eichhoff Sdlg' (82), <i>M. p.</i> 'Jonathan' (252), <i>M. p.</i> 'McIn-	

ROOTSTOCK	SCION	REMARKS
	tosh (252), <i>M. p.</i> 'Red Delicious' (252), <i>M. p.</i> 'Northern Spy' (252)	
<i>Malus pumila</i> 'E.M. XXV' (clonal)	<i>M. pumila</i> 'Grenadier' (153)	
<i>Malus pumila</i> 'E.M. XXVI' (clonal)	<i>M. pumila</i> 36 varieties listed (285) <i>M. unspecified</i> flowering crabapples (185)	Incompatibility with some varieties
<i>Malus ioensis</i> 'Virginia Crab'/ Unspecified	<i>M. pumila</i> 'McIntosh' (202) <i>M. unspecified</i> (14)	Undependable Stem-pit susceptible
<i>Malus pumila</i> 'Hibernal'/ Unspecified	<i>M. pumila</i> 'Gravenstein' (207), <i>M. p.</i> 'Ingrid Marie' (207), <i>M. p.</i> 'Linda' (207), <i>M. p.</i> 'Lobo' (207), <i>M. p.</i> 'McIntosh' (207), <i>M. p.</i> 'Melba' (207), <i>M. p.</i> 'Patricia' (207) <i>M. pumila</i> 'Sarso' (179) <i>M. pumila</i> 'Wealthy' (207)	Poor growth second and subsequent years
<i>Malus pumila</i> Hubutis/ Unspecified	<i>M. pumila</i> 'Gravenstein' (207), <i>M. p.</i> 'Ingrid Marie' (207), <i>M. p.</i> 'Linda' (207), <i>M. p.</i> 'Lobo' (207), <i>M. p.</i> 'Melba' (207), <i>M. p.</i> 'Patricia' (207), <i>M. p.</i> 'Wealthy' (207)	
<i>Malus pumila</i> 'J. Fisher'	<i>M. pumila</i> 'Echter Meyer' (142), <i>M. sargentii</i> (142), <i>M. x</i> 'Dorothea' (142)	
<i>Malus pumila</i> 'M41' (clonal)	<i>M. pumila</i> 'Blenheim Orange' (82), <i>M. p.</i> 'Eichhoff Sdlg' (82)	
<i>Malus pumila</i> 'M.M. 104' (clonal)	<i>M. pumila</i> 'Cortland' (150), <i>M. p.</i> 'Cox Orange' (280), <i>M. p.</i> 'Delicious' (150), <i>M. p.</i> 'McIntosh' (150), <i>M. p.</i> 14 varieties listed (285), <i>M. robusta</i> (243), <i>M. x</i> 'Snow Drift' (243)	
<i>Malus pumila</i> 'M.M. 104' (clonal) (virus free)	<i>M. pumila</i> 'Nieulandiana' (254),	Complete failure
<i>Malus pumila</i> 'M.M. 106' (clonal)	<i>M. pumila</i> 'Cortland' (150), <i>M. p.</i> 'Cox Orange' (280), <i>M. p.</i> 'Delicious' (150), <i>M. p.</i> 'McIntosh' (150), <i>M. p.</i> 14 varieties listed (285)	
<i>Malus pumila</i> 'M.M. 109' (clonal)	<i>M. ionensis</i> 'Betchel's Crab' (254) <i>M. pumila</i> 'Cortland' (150), <i>M. p.</i> 'Delicious' (150) <i>M. pumila</i> 'Echter Meyer' (254) <i>M. pumila</i> 'McIntosh' (150)	Complete failure, virus Complete failure, virus
<i>Malus pumila</i> 'M.M. 111' (clonal)	<i>M. pumila</i> 'Bramley's' (153), <i>M. p.</i> 'Cortland' (150), <i>M. p.</i> 'Cox Orange' (280), <i>M. p.</i> 'Delicious' (150), <i>M. p.</i> 'McIntosh' (150), <i>M. p.</i> 'York Imperial' (285), <i>M. robusta</i> (243), <i>M. sargentii</i> (243), <i>M. x</i> 'Dorothea' (243)	

ROOTSTOCK	SCION	REMARKS
<i>Malus pumila</i> 'M.M. 112' (clonal)	<i>M. pumila</i> 'Blenheim Orange' (82) <i>M. p.</i> 'Eichhoff Sdlg' (82)	
<i>Malus pumila</i> 'M.M. 114' (clonal)	<i>M. pumila</i> 'Blenheim Orange' (82), <i>M. p.</i> 'Eichhoff Sdlg' (82)	
<i>Malus pumila</i> 'Mawnzen'/ Unspecified	<i>M. unspecified</i> (14)	Stem-pit susceptibl
<i>Malus pumila</i> 'Melba'/ Unspecified	<i>M. unspecified</i> (251)	More dwarfing than 'E.M. IX'
<i>Malus pumila</i> 'Merton Immune 793' (clonal)	<i>M. pumila</i> 'Blenheim Orange' (82), <i>M. p.</i> 'Eichhoff Sdlg' (82)	
<i>Malus pumila</i> 'Renet Simirenko'/ Unspecified	<i>M. unspecified</i> (251)	More dwarfing than 'E.M. IX'
<i>Malus pumila</i> 'San Antonio'/ Unspecified	<i>M. pumila</i> 'Winter Banana' (67)	
<i>Malus pumila</i> 'Spy 227' (clonal)	<i>M. pumila</i> 'Baldwin' (91)	Normal
	<i>M. pumila</i> 'Cortland' (91), <i>M. p.</i> 'E.M. VII' (91), <i>M. p.</i> 'E.M. IX' (91)	Decline
	<i>M. pumila</i> 'Early McIntosh' (91), <i>M. p.</i> 'Golden Delicious' (91), <i>M. p.</i> 'Lodi' (91), <i>M. p.</i> 'Macoun' (91), <i>M. p.</i> 'McIntosh' (91)	Normal
	<i>M. pumila</i> 'McIntosh' (91), <i>M. p.</i> 'McIntosh' (Roger) (91)	Decline
	<i>M. pumila</i> 'Munroe' (91), <i>M. p.</i> 'Red Delicious' (Vance) (91)	Normal
	<i>M. pumila</i> 'Red Rome' (91), <i>M. p.</i> 'Red 20-ounce' (91)	Decline
	<i>M. pumila</i> 'Red Wealthy' (91)	Weak
	<i>M. pumila</i> 'Rhode Island Greening' (91), <i>M. p.</i> 'Stark's Earliest' (91), <i>M. p.</i> 'Wellington' (91)	Normal
	<i>M. pumila</i> 'Wellington Bloomless' (91)	Decline
<i>Malus pumila</i> 'Taeznoe'	<i>M. unspecified</i> (5)	
<i>Malus robusta</i> 5	<i>M. ioensis</i> 'Betchel's Crab' (236)	Union break first se
	<i>M. pumila</i> numerous varieties (174)	
<i>Malus robusta</i> 5/ Unspecified	<i>M. pumila</i> 'McIntosh' (202), <i>M. p.</i> 'Patricia' (236)	
<i>Malus sargentii</i> <i>rosea</i>	<i>M. unspecified</i> (211)	
<i>Malus scheideckeri</i>	<i>M. unspecified</i> flowering crabap- ples (194)	
<i>Malus sieboldii</i>	<i>M. unspecified</i> (204)	20-30% decline (stem-pit)
<i>Malus sikkimensis</i> (apomictic)	<i>M. unspecified</i> (33, 211)	

ROOTSTOCK	SCION	REMARKS
<i>Malus sylvestris</i>	<i>M. adstringens</i> 'Hopa' (38), <i>M. micromalus</i> (38), <i>M. pumila</i> 'Belle de Boskoop' (12), <i>M. p.</i> 'Golden Delicious' (12), <i>M. p.</i> 'Jonathan' (12), <i>M. p. niedzwetzkyana</i> (38), <i>M. p. n.</i> 'Flame' (38), <i>M. purpurea eleyi</i> (38)	
<i>Malus toringoides</i>	<i>M. unspecified</i> (211)	Incompatible with many varieties
<i>Malus zumi calocarpa</i>	<i>M. unspecified</i> crabapples (285)	
<i>Malus Unspecified</i> (Caucasian Forest Sdlg)	<i>M. pumila unspecified</i> (284)	Incompatible
<i>Pyrus calleryana</i>	<i>M. unspecified</i> flowering crabapples (95)	Unions weak, break easily
<i>Pyrus communis</i> 'Manzano' / Unspecified	<i>M. pumila</i> 'Winter Banana' (67)	
<i>Pyrus communis</i> 'Winter Nelis'	<i>M. adstringens</i> 'Osman' (56)	No take
<i>Pyrus pashia</i>	<i>M. pumila</i> 'Red Delicious' (240)	
<i>Pyronia veitchei</i>	<i>M. unspecified</i> (211)	
<i>Pyronia veitchei/ Crataegus sp.</i>	<i>M. unspecified</i> (211)	
<i>Pyronia veitchei/ Pyrus sp.</i>	<i>M. unspecified</i> (211)	
<i>Sorbus aucuparia</i>	<i>M. pumila unspecified</i> (71)	
MESPILUS.		
<i>Crataegus oxyacantha</i>	<i>M. germanica</i> (257)	
METASEQUOIA		
<i>Taxodium unspecified</i>	<i>Metosequoia glyptostroboides</i> (171)	Take relatively poor
MORUS.		
<i>Morus alba</i>	<i>M. nigra</i> (243)	Very few successful, weak growth
	<i>M. unspecified</i> (97)	
<i>Morus alba</i> (clonal)	<i>M. alba pendula</i> (7)	
<i>Morus alba tatarica</i>	<i>M. alba pendula</i> (142)	
OLEA:		
<i>Forestiera neomexicana</i>	<i>O. europaea</i> (100)	Delayed incompatibility
<i>Ligustrum unspecified</i>	<i>O. europaea</i> (100, 239)	Decline in 1-2 years
<i>Fraxinus velutina</i>	<i>O. europaea</i> (100)	Delayed incompatibility
<i>Olea chrysophylla</i>	<i>O. europaea</i> most varieties (100)	Incompatible
	<i>O. europaea</i> 'Sevillano' (100)	
<i>Olea europaea</i>	<i>O. europaea</i> (100)	
<i>Olea ferruginea</i>	<i>O. europaea</i> (100)	Incompatible
<i>Olea verrucosa</i>	<i>O. europaea</i> (100)	Incompatible
<i>Syringa vulgaris</i>	<i>O. europaea</i> (100)	Delayed incompatibility
	<i>O. europaea</i> (239)	Low take - early decline

ROOTSTOCK	SCION	REMARKS
OSMANTHUS		
<i>Ligustrum ovalifolium</i>	<i>O. heterophyllis</i> (194)	
<i>Ligustrum vulgare</i>	<i>O. unspecified</i> (97)	
OSTRYA		
<i>Carpinus betulus</i>	<i>O. unspecified</i> (97)	
PARROTEA:		
<i>Hamamelis unspecified</i>	<i>P. unspecified</i> (97)	
PERSEA		
<i>Persea americana</i>	<i>P. americana</i> (83, 215), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	Incompatible, low take, short lived
<i>Persea borbonia</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i>	Incompatible, low take, short lived
	<i>P. borbonis</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea caerulea</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take, short lived
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (3), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea chrysophylla</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take, short lived
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea donnell-smithii</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take, short lived

ROOTSTOCK	SCION	REMARKS
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea durifolia</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take short lived
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea floccosa</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	Incompatible, low take, short lived
<i>Persea gigantea</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	Incompatible, low take short lived
<i>Persea indica</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take, short lived
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea lingue</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take, short lived
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea longipes</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	

ROOTSTOCK	SCION	REMARKS
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	Incompatible, low take, short lived
<i>Persea nubigena</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysolphylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	Incompatible, low take, short lived
<i>Persea palustris</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take, short lived
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea portoricensis</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take, short lived
	<i>P. borbonis</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (82), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	
<i>Persea schiedeana</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	Incompatible, low take, short lived
<i>Persea skutchii</i>	<i>P. americana</i> (83), <i>P. floccosa</i> (83), <i>P. gigantea</i> (83), <i>P. longipes</i> (83), <i>P. nubigena</i> (83), <i>P. schiedeana</i> (83)	Incompatible, low take, short lived
	<i>P. borbonia</i> (83), <i>P. caerulea</i> (83), <i>P. chrysophylla</i> (83), <i>P. donnell-smithii</i> (83), <i>P. durifolia</i> (83), <i>P. indica</i> (83), <i>P. lingue</i> (83), <i>P. palustris</i> (83), <i>P. portoricensis</i> (83), <i>P. skutchii</i> (83)	

ROOTSTOCK	SCION	REMARKS
PHILADELPHUS.		
<i>Philadelphus coronarius nana</i>	<i>P. coronarius</i> (277)	No take, difficult to work
PHILLYREA		
<i>Ligustrum vulgare</i>	<i>P. unspecified</i> (97)	
PHOTINIA		
<i>Crataegus unspecified</i>	<i>P. unspecified</i> (97)	
<i>Cydonia oblonga</i> 'Provence' (clonal)	<i>P. glabra</i> (194)	
<i>Cydonia unspecified</i>	<i>P. unspecified</i> 'Toyon' (171), <i>P. unspecified</i> (97)	
<i>Photonia frazeri</i> (clonal)	<i>P. arbutifolia macrocarpa</i> (7)	
<i>Photonia serrulata nova</i> (clonal)	<i>P. arbutifolia macrocarpa</i> (7, 215)	
<i>Pyracantha lalandii</i>	<i>P. unspecified</i> 'Toyon' (171)	
PHYSOCARPUS.		
<i>Physocarpus opulifolius nanus</i>	<i>P. opulifolius</i> (277)	No take, difficult to work
PICEA.		
<i>Picea abies</i>	<i>P. abies</i> varieties (263), <i>P. a. inversa pendula</i> (108), <i>P. a. pendula</i> (108), <i>P. a. 'Maxwelli'</i> (108) <i>P. mariana doumeti</i> (263) <i>P. pungens</i> varieties (263), <i>P. p. glauca globosa</i> (108), <i>P. p. g. 'Hoopsi'</i> (15, 108), <i>P. p. g. 'Kosteriana'</i> (57, 176), <i>P. p. g. 'Moerheimi'</i> (15, 108), <i>P. p. g. 'Montgomery'</i> (108), <i>P. p. unspecified</i> (31, 185, 274)	Very low take
<i>Picea abies concolor</i>	<i>P. abies concolor</i> varieties (184)	
<i>Picea excelsa</i>	<i>P. glauca conica</i> (156), <i>P. pungens glauca</i> 'Hoopsi' (38), <i>P. p. g. 'Kosteriana'</i> (158), <i>P. p. g. 'Moerheimi'</i> (38, 158), <i>P. nidiformis</i> (38)	
<i>Picea glauca</i>	<i>P. abies</i> varieties (263), <i>P. pungens unspecified clones</i> (185), <i>P. unspecified</i> (176)	
<i>Picea glauca densata</i>	<i>P. pungens glauca</i> 'Thompson's' (131)	Weak union, suspect virus
<i>Picea sitchensis</i>	<i>P. pungens glauca</i> 'Kosteriana' (57)	
PINUS:		
<i>Pinus densiflora</i>	<i>P. densiflora oculus-draconis</i> (263), <i>P. d. pendula</i> (108), <i>P. d. umbraculifera</i> (108, 263)	
<i>Pinus echinata</i>	<i>P. echinata</i> (183)	
<i>Pinus muogo</i>	<i>P. several species</i> (183)	

ROOTSTOCK	SCION	REMARKS
<i>Pinus nigra</i>	<i>P. bungeana</i> (267), <i>P. cembroides</i> <i>edulis</i> (267), <i>P. densiflora</i> 'Taryesha' (185), <i>P. d.</i> 'Umbrella' (267), <i>P. mugo mughus</i> (267), <i>P. nigra austriaca</i> (156), <i>P. pinaster</i> (267), <i>P. ponderosa</i> (267), <i>P. sylvestris fastigiata</i> (185), <i>P. s. varieties</i> (184), <i>P.</i> (Two and three needle) (183)	
<i>Pinus resinosa</i>	<i>P.</i> (Two and three needle) (183)	
<i>Pinus strobus</i>	<i>P. bungeana</i> (108, 263), <i>P. cembra</i> (15, 38, 108, 156, 263), <i>P. c. glauca</i> (263), <i>P. cembroides monophylla</i> (263), <i>P. flexilis</i> (184, 185, 263), <i>P. f. glauca pendula</i> (263), <i>P. griffithi</i> (108, 263), <i>P. koraiensis</i> (108), <i>P. parvifolia</i> (38, 156), <i>P. p. glauca</i> (108, 263), <i>P. peuce</i> (108), <i>P. strobus</i> (184), 185,) <i>P. s. brevifolia</i> (108), <i>P. s. fastigiata</i> (38, 156), <i>P. s. nana</i> (108), <i>P. s. pendula</i> (108), <i>P. s. torulosa</i> (108), <i>P. s. umbraculifolia</i> (108), <i>P.</i> (Five needle) (183)	
<i>Pinus sylvestris</i>	<i>P. bungeana</i> (263)	Delayed incompatibility
	<i>P. sylvestris</i> clones (15), <i>P. s. fastigiata</i> (273)	
	<i>P. sylvestris fastigiata</i> (263)	Often poor union
	<i>P. sylvestris glauca compacta</i> (263), <i>P. s. g. globosa</i> (108), <i>P. s. 'Riverside Gem'</i> (263), <i>P. s. 'Watereri'</i> (108, 263), <i>P.</i> (Two and three needle pines) (183)	
<i>Pinus thunbergii</i>	<i>P. densiflora pendula</i> (108), <i>P. d. umbraculifera</i> (108)	
PISTACIA		
<i>Pistacia lentiscus</i>	<i>P. vera</i> 'Kerman' (239), <i>P. v. 'Lassen'</i> (239), <i>P. v. 'Sfax'</i> (239)	Low take and dwarfing
PLATANUS.		
<i>Platanus occidentalis</i>	<i>P. occidentalis</i> clones (152)	Delayed incompatibility
PONCIRUS.		
<i>Citrus mitis</i>	<i>P. trifoliata</i> (83)	
POPULUS:		
<i>Populus balsamifera</i>	<i>P. alba pyramidalis</i> (120)	
<i>Populus alba nivea</i>	<i>P. tremuloides</i> (194)	
<i>Populus nigra italica</i>	<i>P. alba pyramidales</i> (97, 185)	
<i>Populus robusta</i>	<i>P. lasiocarpa</i> (194)	

ROOTSTOCK	SCION	REMARKS	
PRUNUS			
<i>Prunus americana</i>	<i>P. avium</i> unspecified (56)	No take	
	<i>P. cerasus</i> 'Coronation' (56), <i>P. c.</i> 'Montmorency' (56)	Low take, weak union	
	<i>P. cerasus</i> 'North Star' (56)	No take	
	<i>P. cerasus</i> 'Wragg' (56)	Low take, weak union	
	<i>P. mandshurica</i> 'Anda' (56), <i>P. m.</i> 'Robust' (56), <i>P. m.</i> 'Scout' (56), <i>P. m.</i> 'Sing' (56)	Delayed incompatibility	
	<i>P. tenella</i> hybrid (56)	Low take, weak union	
	<i>P. tomentosa</i> 'Drilea' (56)	Either no take or delayed incompatibility	
	<i>P. tomentosa</i> 'Orient' (56)	No take	
	<i>P. tomentosa</i> x <i>P. besseyi</i> 'Eileen' (56), <i>P. triloba</i> (56), <i>P. t.</i> x <i>P. pedunculata</i> 'Morden Almond' (56), <i>P. t.</i> x <i>P. p.</i> 'Prairie Almond' (56), <i>P. virginiana</i> 'Shubert' (56)	Low take, delayed incompatibility	
	<i>Prunus amygdalus</i> (<i>communis</i>)	<i>P. armeniaca</i> 'Alawi' (239), <i>P. a.</i> 'Beladi' (239), <i>P. a.</i> 'Canino' (239), <i>P. a.</i> 'Hatif de Colomer' (239)	Weak, excessive breakage, incompatible Better success with <i>P. a.</i> 'Alawi' and <i>P. a.</i> 'Beladi' grafted high
		<i>P. armeniaca</i> 'Hungarian' (242)	Not as good as apricot
		<i>P. triflora</i> (239)	Decline and death, unions imperfect especially on <i>P. t.</i> 'Ogden' and <i>P. t.</i> 'Beauty'
	<i>P. amygdalus</i> x <i>P. persica</i>	<i>P. amygdalus</i> (127), <i>P. persica</i> (127)	
	<i>Prunus armeniaca</i>	<i>P. armeniaca</i> 'Hungarian' (242)	
<i>P.</i> unspecified plum varieties (246)		Some varieties incompatible	
<i>Prunus armeniaca</i> 'Hindukusek'	<i>P. persica</i> unspecified (257)		
<i>Prunus armeniaca</i> 'Marablin'	<i>P. armeniaca</i> 'Falca Rosey' (145)		
<i>Prunus avium</i>	<i>P. avium</i> 'Leningradskaja' (133), <i>P. a.</i> 'Leningradskaja Cernaja' (133), <i>P. maackii</i> (116), <i>P. serrula</i> (116), <i>P. serrulata</i> 'Amanagawa' (142), <i>P. s.</i> 'Fugenso' (142), <i>P. s.</i> 'Hokusai' (142), <i>P. s.</i> 'Kiku-Shidare' (142), <i>P. s.</i> 'Kwanzan' (142), <i>P. s.</i> 'Miyako' (142), <i>P. s.</i> 'Shogetsu' (142), <i>P. s.</i> 'Takasago' (142)		
	<i>P. serrulata</i> (194)	Poor budding, good grafting	
	<i>P. serrulata</i> (156)		
	<i>P. autumnalis</i> (254)		
	<i>P. avium duracina</i> (194)	Low take by budding, grafting alright	
	<i>P. sargentii</i> (254), <i>P. serrula</i> (254)		
	<i>P. serrulata</i> (194)		
	<i>P. serrulata</i> (156)		
	<i>P. autumnalis</i> (254)		
	<i>P. avium duracina</i> (194)		

ROOTSTOCK	SCION	REMARKS
	<i>P. serrulata</i> 'Amanagawa' (254), <i>P. s.</i> 'Kiku Sakura' (254), <i>P. s.</i> 'Kwanzan' (254), <i>P. s.</i> 'Myako' (254), <i>P. s.</i> 'Pink Per- fection' (254), <i>P. s.</i> 'Shiro Fugens' (254)	Intolerant to virus
	<i>P. sieboldii</i> (254), <i>P. subhirtella</i> 'Accoladi' (254), <i>P. s.</i> 'Aken- bono' (254), <i>P. s.</i> 'Pandora' (254), <i>P. s.</i> 'Whitcombe' (254)	
	<i>P. subhirtella pendula</i> (254)	Intolerant to virus
<i>Prunus avium</i> <i>durancia</i>	<i>P. unspecified</i> plums (235)	
<i>Prunus besseyi</i>	<i>P. ameniaca</i> unspecified (277), <i>P. avium</i> unspecified (56), <i>P.</i> <i>cerasus</i> 'Bessarabia' (56), <i>P.</i> <i>c.</i> 'Coronation' (56), <i>P. c.</i> 'Vladimir' (56), <i>P. c.</i> 'Mont- morency' (56), <i>P. c.</i> 'North Star' (56)	No take
	<i>P. cerasus</i> 'Wragg' (56)	Low take, weak unions
	<i>P. fruticosa</i> (56)	No take
	<i>P. mandshurica</i> 'Scout' (56)	Low take, weak unions
	<i>P. padus</i> (56), <i>P. pennsylvanica</i> 'Stockton' (56)	No take
	<i>P. persica</i> dwarf ornamentals (114, 211)	
	<i>P. persica</i> dwarf ornamentals (2)	Stunting and death
	<i>P. persica</i> unspecified (277)	No take
	<i>P. persica</i> unspecified (81)	Incompatible
	<i>P. salicina</i> hybrid (157)	Poor take, unsatisfactory
	<i>P. tomentosa</i> 'Drilea' (56), <i>P. triloba</i> x <i>P. pedunculata</i> 'Prairie Almond' (56), <i>P. vir- giniana</i> 'Spearfish' (56), <i>P.</i> unspecified cherry x plum 'Hiawatha' (277)	No take
	<i>P. unspecified</i> cherry x plum 'Sacagawea' (277)	
	<i>P. unspecified</i> plum 'Chinook', 'Gracious', 'Iowa #10', 'Monitor', 'Underwood' (277)	No take
	<i>P. unspecified</i> plums (181, 211)	
<i>Prunus cerasifera</i>	<i>P. ameniaca</i> unspecified (190), <i>P.</i> <i>mume</i> (116), <i>P. unspecified</i> 'Kjustendil Blue' (122), <i>P. un- specified</i> plums (9)	
<i>Prunus cerasifera</i> 'Marianna' (clonal)	<i>P. domestica</i> 'Czar' (254) <i>P. persica</i> 'Beale' (201), <i>P. p.</i> 'Duraznella de Sagtogo' (244), <i>P. p.</i> 'Hale's Early' (244), <i>P. p.</i> 'Smith' (201), <i>P. triloba</i> (194), <i>P. unspecified</i> 'Early Laxton' (254)	Incompatible
<i>Prunus cerasifera</i> 'Marianna 8-1' (clonal)	<i>P. ameniaca</i> 'Bergeron' (194) <i>P. ameniaca</i> 'Canino' (194)	Low take, weak union

ROOTSTOCK	SCION	REMARKS
	<i>P. ameniaca</i> 'Luizet' (194), <i>P. a.</i> 'Peche de Nancy' (194), <i>P. a.</i> 'Polonais' (194), <i>P. blireana</i> (194), <i>P. b. moseri</i> (194), <i>P. b. (pissardi)</i> (194), <i>P. domestica</i> (194)	
<i>Prunus cerasifera</i> 'Marianna 2624' (clonal)	<i>P. triloba</i> (194)	Low take, weak union
	<i>P. amygdalus</i> 'Davey' (128), <i>P. a.</i> 'Drake' (128)	Unsatisfactory
	<i>P. amygdalus</i> 'Jordanolo' (128), <i>P. a.</i> 'Ne Plus Ultra' (128)	
	<i>P. amygdalus</i> 'Nonpariel' (128)	Unsatisfactory
	<i>P. amygdalus</i> 'Peerless' (128), <i>P. a.</i> 'Texas (Mission)' (128),	
<i>Prunus cerasifera</i> 'Marianna 2626' (clonal)	<i>P. unspecified</i> 'Kelsey' (239)	Delayed incompatibility
<i>Prunus cerasifera</i> 'Myrobolan'	<i>P. blireana</i> (194), <i>P. b. moseri</i> (194), <i>P. b. (pissardi)</i> (194), <i>P. domestica</i> unspecified (194)	
	<i>P. persica</i> unspecified (194)	Delayed incompatibility 2-5 years
	<i>P. unspecified</i> 'Tuleu gras' (147, 168)	Incompatible
<i>Prunus cerasifera</i> 'Myrobolan B' (clonal)	<i>P. persica</i> 'Beale' (201), <i>P. p.</i> 'Duraznella de Sastago' (244, 245), <i>P. p.</i> 'Hale's Early' (244, 245), <i>P. p.</i> 'Smith' (201)	Incompatible
	<i>P. unspecified</i> plums (254)	
<i>Prunus cerasifera</i> <i>divinicata</i>	<i>P. avium</i> 'Leningradskaja' (133), <i>P. a.</i> 'Leningradskaja Cernaja' (133)	Unsatisfactory
<i>Prunus cerasifera</i> 'Myrobolan' x <i>P. communis</i> (Hybrid P. 566-1) (clonal)	<i>P. persica</i> unspecified (16)	
<i>Prunus cerasifera</i> 'Myrobolan' x <i>P. persica</i> (Hybrid D322 x 5.1057) (clonal)	<i>P. persica</i> unspecified (16)	
<i>Prunus cerasus</i>	<i>P. ameniaca</i> x <i>P. besseyi</i> 'Yuksa' (56)	No take
	<i>P. avium</i> 'Leningradskaja' (133), <i>P. a.</i> 'Leningradskaja Cernaja' (133)	
	<i>P. besseyi</i> 'Sioux' (56), <i>P. mandshurica</i> 'Scout' (56), <i>P. persica</i> 'Davidiana' (56), <i>P. salicina</i> 'Russian Green Gage' (56)	No take
	<i>P. salicina</i> (239)	Weak unions
	<i>P. tomentosa</i> 'Drilea' (56), <i>P. unspecified</i> 'Pembina' (56)	No take
<i>Prunus cerasus</i> 'Montmorency'	<i>P. cerasus</i> 'Bing' (118), <i>P. c.</i> 'Windsor' (118)	
<i>Prunus domestica</i>	<i>P. unspecified</i> 'Kjustendil Blue' (122)	

ROOTSTOCK	SCION	REMARKS
<i>Prunus domestica</i> 'Belle de Louvain' /Myrobolan	<i>P. armeniaca</i> 'Luizet' (194), <i>P. a.</i> 'Pech de Nancy' (194), <i>P. a.</i> 'Precoce de Boulbon' (194), <i>P. a.</i> 'Precoce de Monplaisir' (194), <i>P. a.</i> 'Royal' (194), <i>P. a.</i> 'Sucre de Holub' (194), <i>P.</i> <i>blireana</i> (194), <i>P. b. moseri</i> (194), <i>P. b. (pissardi)</i> (194),	
<i>Prunus domestica</i> 'Brompton' (clonal)	<i>P. persica</i> 'Beale' (201), <i>P. p.</i> 'Duraznella de Sastago' (244, 245), <i>P. p.</i> 'Hale's Early' (244, 245), <i>P. p.</i> 'Smith' (201)	
<i>Prunus domestic</i> 'Holerosse'/ 'Myrobolan'	<i>P. persica</i> unspecified (194)	
<i>Prunus domestica</i> 'Krasinski'/ 'Myrobolan'	<i>P. blireana</i> (194), <i>P. b. moseri</i> (194), <i>P. b. (pissardi)</i> (194)	Weak with <i>P. blireana</i> first year
<i>Prunus domestica</i> 'St. Julien d'Orleans'	<i>P. persica</i> unspecified (194)	50-70% only if virus free
<i>Prunus domestica</i> 'St. Julien d'Orleans #1' (virus free)	<i>P. persica</i> unspecified (194)	85-95% with virus free varieties
<i>Prunus domestica</i> <i>insititia</i>	<i>P. unspecified</i> 'Kjustendil Blue' (257), <i>P. unspecified</i> plums (44)	
<i>Prunus domestica</i> <i>insititia</i> 'Damas A' (clonal)	<i>P. persica</i> 'Duraznella de Sastago' (244), <i>P. p.</i> 'Hale's Early' (244)	
<i>Prunus domestica</i> <i>insititia</i> 'Damas B' (clonal)	<i>P. persica</i> 'Duraznella de Sastago' (244), <i>P. p.</i> 'Hale's Early' (244)	
<i>Prunus domestica</i> <i>insititia</i> 'Damas C'	<i>P. persica</i> 'Beale' (201), <i>P. p.</i> 'Smith' (201)	
<i>Prunus domestica</i> <i>insititia</i> 'Damas C' (clonal)	<i>P. persica</i> 'Duranznella de Sastago' (244), <i>P. p.</i> 'Hale's Early' (244), <i>P. unspecified</i> plums (235)	
<i>Prunus domestica</i> <i>insititia</i> 'Damas P12' (clonal)	<i>P. persica</i> 'Duraznella de Sastago' (244), <i>P. p.</i> 'Hale's Early' (244)	
<i>Prunus domestica</i> <i>insititia</i> 'Bjalja Ukrepka'	<i>P. unspecified</i> 'Kjustendil Blue' (122)	
<i>Prunus domestica</i> <i>insititia</i> 'St. Julien' (clonal)	<i>P. persica</i> 'Beale' (201), <i>P. p.</i> 'Smith' (201), <i>P. unspecified</i> plums (235)	
<i>Prunus domestica</i> <i>insititia italica</i> 'Frohn'	<i>P. armeniaca</i> 'Fruhe Deutsche' (77)	
<i>Prunus dropmoreana</i>	<i>P. cerasus</i> 'Windsor' (118) <i>P. fruticosa</i> (56) <i>P. virginiana</i> 'Shubert' (56)	No take Delayed incompatibility

ROOTSTOCK	SCION	REMARKS
<i>Prunus fruticosa</i>	<i>P. cerasus</i> 'Coronation' (56) <i>P. c.</i> 'Montmorency' (56), <i>P. c.</i> 'Moscow' (56), <i>P. c.</i> 'Wragg' (56), <i>P. fruticosa</i> (56)	No take
<i>Prunus japonica</i>	<i>P. avium</i> unspecified (56) <i>P. ameniaca</i> hybrids (56) <i>P. besseyi</i> 'Brooks' (56) <i>P. besseyi</i> x plum 'Sapa' (56) <i>P. cerasus</i> 'Bessbarabia' (56), <i>P. c.</i> 'Coronation' (56), <i>P. c.</i> 'Dyehouse' (56), <i>P. c.</i> 'Meteor' (56), <i>P. c.</i> 'Montmorency' (56), <i>P. c.</i> 'North Star' (56), <i>P. c.</i> 'Vladimir' (56), <i>P. c.</i> 'Wragg' (56), <i>P. fruticosa</i> (56) <i>P. mandshurica</i> 'Scout' (56) <i>P. nigra</i> 'Mina' (56) <i>P. nigra</i> 'Bounty' (56) <i>P. pennsylvanica</i> 'Stockton' (56), <i>P. tomentosa</i> 'Drilea' (56)	No take Low take, weak unions Delayed incompatibility Weak union Excessive breakage, delayed incompatibility
<i>Prunus maackii</i>	<i>P. cerasus</i> 'Leningradskaia' (133), <i>P. c.</i> 'Leningradskaia Cernaja' (133) <i>P. cerasus</i> 'Wragg' (56), <i>P. tomentosa</i> 'Drilea' (56), <i>P. serotina</i> (56), <i>P.</i> unspecified plum 'Grenville' (56), <i>P. mandshurica</i> 'Scout' (56), <i>P. persica</i> x plum 'Manitou' (56), <i>P. triloba</i> (56)	Unsatisfactory No take
<i>Prunus maackii</i> x <i>P. cerasus</i> 'Vladmirskaja'	<i>P. cerasus</i> 'Leningradskaia' (133), <i>P. c.</i> 'Leningradskaia Cernaja' (133)	Unsatisfactory
<i>Prunus mahaleb</i>	<i>P. avium</i> varieties (239) <i>P. avium duracina</i> (194), <i>P. a.</i> x <i>P. cerasus</i> 'Duke Cherries' (194), <i>P. a.</i> unspecified (265), <i>P. cerasus</i> 'Montmorency' (194), <i>P. c.</i> unspecified (114), <i>P.</i> unspecified cherries (36)	Often delayed incompatibility
<i>Prunus maritima</i>	<i>P. avium</i> (211)	
<i>Prunus nigra</i>	<i>P. cerasus</i> 'Coronation' (56) <i>P. cerasus</i> 'Wragg' (56), <i>P. cistena</i> (142) <i>P. domestica</i> unspecified (181) <i>P. japonica</i> (56) <i>P. mandshurica</i> (56), <i>P. m.</i> 'Scout' (56), <i>P. m.</i> 'Ninguta' (56) <i>P. padus</i> (56) <i>P. salicina</i> unspecified (157) <i>P. tenella</i> hybrid (56), <i>P. tomentosa</i> 'Drilea' (56) <i>P. triloba</i> (142) <i>Prunus</i> unspecified hexaploid plums (6)	Low take, weak union No take Low take No take Delayed incompatibility No take Low take, suspect virus No take Incompatible

ROOTSTOCK	SCION	REMARKS
<i>Prunus nigra</i> 'Assiniboine'	<i>P. cerasus</i> 'Coronation' (56), <i>P. pennsylvanica</i> 'Stockton' (56)	Low take, weak union
<i>Prunus padus</i>	<i>P. cerasus</i> unspecified (56)	No take
	<i>P. fruticosa</i> (68)	Died during summer
	<i>P. japonica</i> (56)	No take
	<i>P. maackii</i> (116)	Incompatible
	<i>P. mandshurica</i> 'M-600' (56), <i>P. nigra</i> 'Assiniboine' (56)	No take
	<i>P. padus</i> (116)	
	<i>P. pennsylvanica</i> 'Stockton' (56)	No take
	<i>P. serotina</i> (116)	
	<i>P. triloba</i> x <i>P. pedunculata</i> 'Prairie Almond' (56)	Weak union, delayed incompatibility
	<i>P. virginiana</i> 'Shubert' (11)	Depends on weather
<i>Prunus pennsylvanica</i>	<i>P. besseyi</i> 'Brooks' (56)	No take
	<i>P. besseyi</i> x plum 'Sapa' (56)	Low take, weak union
	<i>P. cerasus</i> 'Coronation' (56)	No take
	<i>P. fruticosa</i> (68)	Grew 6-12 in., then died
	<i>P. mandshurica</i> 'M-600' (56), <i>P. nigra</i> 'Assiniboine' (56)	No take
	<i>P. nigra</i> 'Mina' (56)	Very low take, weak union
<i>Prunus persica</i>	<i>P. persica</i> unspecified (73, 114)	
	<i>P. unspecified</i> 'Burton Prune' (171)	Incompatible
<i>Prunus persica</i> 'Lovell'	<i>P. persica</i> unspecified (114)	
<i>Prunus persica</i> 'Nemaguard'	<i>P. amygdalus</i> 'Davy' (272)	Outgrows stock
	<i>P. amygdalus</i> 'Nonpariel' (272), <i>P. a.</i> 'Texas' (272), <i>P. persica</i> unspecified (272)	
<i>Prunus persica</i> (Red-Leaf)	<i>P. persica</i> unspecified (114)	
<i>Prunus persica</i> 'Roter Elerstadter'	<i>P. persica</i> unspecified (257)	
<i>Prunus persica</i> 'Weinberg's'	<i>P. persica</i> unspecified (73)	
<i>Prunus persica</i> <i>sylvestris</i>	<i>P. armeniaca</i> unspecified (194)	Delayed incompatibility
<i>Prunus persica</i> x <i>P. amygdalus</i>	<i>P. persica</i> 'Duraznella de Sastago' (244), <i>P. p.</i> 'Hale's Early' (244)	
<i>Prunus salicina</i>	<i>P. salicina</i> (157), <i>P. triflora</i> <i>multiplex</i> (68)	Suckering a problem
	<i>P. virginiana</i> 'Shubert' (254)	Low take
<i>Prunus serotina</i>	<i>P. besseyi</i> (56), <i>P. cerasus</i> 'Coronation' (56), <i>P. c.</i> 'Mont- morency' (56), <i>P. c.</i> 'Moscow' (56), <i>P. c.</i> 'Vladimir' (56), <i>P. c.</i> 'Wragg' (56), <i>P. fruticosa</i> (56), <i>P. pennsylvanica</i> 'Stockton' (56), <i>P. p.</i> 'Jumping Pound' (56), <i>P.</i> <i>tomentosa</i> 'Drilea' (56)	No take
	<i>P. virginiana</i> 'Shubert' (56)	Very low take, weak union
<i>Prunus sibirica</i>	<i>P. cerasus</i> 'Coronation' (56)	Either no take or weak unions

ROOTSTOCK	SCION	REMARKS
	<i>P. domestica</i> 'Belgian Green Gage' (56), <i>P. japonica</i> (56), <i>P. persica</i> 'Davidiana' (56), <i>P. tenella</i> (56), <i>P. tomentosa</i> 'Drilea' (56), <i>P. triloba</i> (56)	No take
<i>Prunus spinosa</i>	<i>P. virginiana</i> 'Spearfish' (56)	Low take, weak union
<i>Prunus spinosa</i> (clonal)	<i>P. unspecified</i> (148)	Incompatible
<i>Prunus subhirtella pendula</i>	<i>P. domestica</i> 'Czar' (254), <i>P. d.</i> 'Victoria' (254)	Seems to knit, no survival
<i>Prunus tomentosa</i>	<i>P. persica</i> 'Red Haven' (277)	Very low take, weak unions
	<i>P. armeniaca</i> hybrids (56)	Incompatible
	<i>P. armeniaca</i> unspecified (211)	No take
	<i>P. avium</i> unspecified (56)	Very low take, weak unions
	<i>P. besseyi</i> 'Manmoor' (56)	No take
	<i>P. besseyi</i> x plum 'Sapa' (277)	Low take, weak union
	<i>P. cerasus</i> 'Coronation' (56)	No take
	<i>P. cerasus</i> 'North Star' (56)	Low take, weak union
	<i>P. cerasus</i> 'Wragg' (56)	No take
	<i>P. cistena</i> (68, 142)	No take
	<i>P. fruticosa</i> (56)	Died during summer
	<i>P. fruticosa</i> (68)	No take
	<i>P. japonica</i> (56)	Low take, weak unions
	<i>P. mandshurica</i> 'M-600' (56)	No take
	<i>P. mandshurica</i> unspecified (56)	Very low take, weak union
	<i>P. nigra</i> 'Assiniboine' (56), <i>P. n.</i> 'Mammoth' (56)	No take
	<i>P. pennsylvanica</i> 'Osteim' (56), <i>P. p.</i> 'Stockton' (56)	Stunting and death
	<i>P. persica</i> (2)	Varying compatibility with varieties
	<i>P. persica</i> (114)	No take
	<i>P. persica</i> (211)	No take
	<i>P. salicina</i> (56), <i>P. simonii</i> 'Toka' (56)	Poor take
	<i>P. triloba</i> (142), <i>P. triloba multiplex</i> (211)	Poor growth, all dead in three years
	<i>P. virginiana</i> 'Shubert' (68)	No take
	<i>P. unspecified</i> plum 'Iowa #10' (277)	No take
	<i>P. unspecified</i> plum 'Monitor' (277)	
	<i>P. unspecified</i> ornamental plums (211)	
<i>Prunus triloba</i>	<i>P. armeniaca</i> unspecified (211), <i>P. persica</i> unspecified (211)	
<i>Prunus virginiana</i>	<i>P. avium</i> 'Leningradskaja' (133), 'Leningradskaja Cernaja' (133)	Unsatisfactory
	<i>P. fruticosa</i> (68)	Died during summer
	<i>P. pennsylvanica</i> 'Stockton' (56), <i>P. tomentosa</i> (56), <i>P. triloba</i> x <i>P. pedunculata</i> 'Prairie Almond' (56)	No take

ROOTSTOCK	SCION	REMARKS
<i>Prunus</i> unspecified plum	<i>P. ameniaca</i> 'Falca Rosey' (145)	
<i>Prunus</i> unspecified plum 'Ackermann'	<i>P. ameniaca</i> unspecified (77), <i>P. persica</i> 'Beale' (201), <i>P. p.</i> 'Duraznella de Sastago' (244), <i>P. p.</i> 'Hale's Early' (244), <i>P. p.</i> 'Smith' (201)	
<i>Prunus</i> unspecified 'Brunker'	<i>P. unspecified</i> plums (213)	
<i>Prunus</i> unspecified plum 'Buburuz'	<i>P. ameniaca</i> unspecified (190)	
<i>Prunus</i> unspecified plum 'Buck'	<i>P. domestica</i> unspecified (93), <i>P. unspecified</i> 'D'Agen prune' (59)	
<i>Prunus</i> unspecified 'Cervena Slwka'	<i>P. unspecified</i> plums (235)	Unsuitable
<i>Prunus</i> unspecified 'Common Mussel'	<i>P. domestica</i> 'Czar' (254)	
<i>Prunus</i> unspecified plum 'Galben'	<i>P. ameniaca</i> unspecified (190)	
<i>Prunus</i> unspecified plum 'Gras'	<i>P. ameniaca</i> unspecified (190)	
<i>Prunus</i> unspecified 'Haizwetsche (clonal)'	<i>P. ameniaca</i> unspecified (211)	
<i>Prunus</i> unspecified 'Hindukusch'	<i>P. ameniaca</i> 'Spate Deutsche' (77), <i>P. a.</i> 'Spate Ungarische' (77)	
<i>Prunus</i> unspecified 'Hungarian Best'	<i>P. ameniaca</i> unspecified (73)	
<i>Prunus</i> unspecified 'Krasinski'/ Unspecified	<i>P. blireana</i> (194), <i>P. b. moseri</i> (194), <i>P. b. (pissardi)</i> (194)	
<i>Prunus</i> unspecified 'Kriechenpflaumen' (yellow fruited) (clonal)	<i>P. ameniaca</i> unspecified (73)	
<i>Prunus</i> unspecified 'Koloniepflaume'	<i>P. ameniaca</i> unspecified (77)	
<i>Prunus</i> unspecified 'Millionaire Type 1'	<i>P. ameniaca</i> unspecified (73)	
<i>Prunus</i> unspecified 'Millionaire Type 2'	<i>P. ameniaca</i> unspecified (73)	
<i>Prunus</i> unspecified plum P.P. 26c	<i>P. unspecified</i> plum (257)	
<i>Prunus</i> unspecified 'Prince Englebert'/ Unspecified	<i>P. ameniaca</i> 'Bergeron' (194) <i>P. ameniaca</i> 'Royal' (194) <i>P. blireana</i> (194), <i>P. b. moseri</i> (194), <i>P. b. (pissardi)</i> (194)	Not suitable Very weak growth
<i>Prunus</i> unspecified 'Rosier'	<i>P. unspecified</i> 'Tuleu gras' (147)	
<i>Prunus</i> unspecified plum 'Schwamborn 103' (clonal)	<i>P. persica</i> unspecified (124), <i>P. unspecified</i> (213)	
<i>Prunus</i> unspecified 'Tuleu gras'	<i>P. unspecified</i> 'Tuleu gras' (147, 168)	Incompatible

ROOTSTOCK	SCION	REMARKS
<i>Prunus</i> unspecified prune 'Wagenheim'	<i>P. unspecified</i> plums (235)	Unsuitable
<i>Prunus</i> unspecified (Wild Plum)	<i>P. ameniaca</i> 'Hungarian' (242)	Union not as good as apricot
PSUEDOSTUGA:		
<i>Psuedotsuga</i> <i>menziesii</i>	<i>P. menziesii</i> (26) <i>P. menziesii</i> (53)	Incompatibility varies with clones
<i>Psuedotsuga</i> unspecified	<i>P. unspecified</i> (184)	
PTELEA:		
<i>Ptelea trifoliata</i>	<i>P. unspecified</i> (97)	
PYRACANTHA.		
<i>Chaenomalis</i> <i>japonica</i>	<i>P. coccinea</i> 'Lalandii' (71)	No success
<i>Malus pumila</i>	<i>P. coccinea</i> 'Lalandii' (71)	No success
<i>Pyracantha coc-</i> <i>cinea</i> 'Lalandii'	<i>P. coccinea</i> 'Lalandii' (71)	No success
<i>Kosa multiflora</i>	<i>P. coccinea</i> 'Lalandii' (71)	No success
<i>Sorbus aucuparia</i>	<i>P. coccinea</i> 'Lalandii' (71)	No success
PYRONIA.		
<i>Malus pumila</i>	<i>P. veitchi</i> (277)	
PYRUS:		
<i>Amelanchier cana-</i> <i>densis</i>	<i>P. communis</i> 'Anjou' (277)	Shields took, bud failed
	<i>P. unspecified</i> (180)	Some incompatible
<i>Aronia melano-</i> <i>carpa</i>	<i>P. communis</i> 'Anjou' (277) <i>P. communis</i> 'Bartlett' (277) <i>P. unspecified</i> (180)	1/3 bud take Bud take low Incompatible
<i>Chaenomeles</i> <i>lagendria</i>	<i>P. communis</i> 'Bartlett' (285)	
<i>Chaenomeles lagen-</i> <i>aria pygmea</i>	<i>P. communis</i> 'Magness' (285)	
<i>Cotoneaster</i> <i>acutifolia</i>	<i>P. communis</i> 'Anjou' (277), <i>P. c.</i> 'Bartlett' (277)	Shields took, buds failed
<i>Crataegus</i> <i>azarolus</i>	<i>P. communis</i> unspecified varieties (239)	Early decline
<i>Crataegus monogyna</i>	<i>P. unspecified</i> (180)	Incompatible
<i>Crataegus oxyacantha</i>	<i>P. unspecified</i> (279)	
<i>Cydonia oblonga</i> 'Angers' (clonal)	<i>P. unspecified</i> (58)	
<i>Cydonia oblonga</i> 'Mosna' (clonal)	<i>P. communis</i> 'Cure' (146, 199)	
<i>Cydonia oblonga</i> 'Provence' (clonal)	<i>P. communis</i> 'Bartlett' (277), <i>P. c.</i> 'Packham's Triumph' (277), <i>P. communis</i> 'Jules Guyot' (Early Bartlett) (277) <i>P. unspecified</i> (58)	Poor growth
<i>Cydonia oblonga</i> 'Quince A' (clonal)	<i>P. communis</i> 'Bartlett' (254), <i>P.</i> <i>c.</i> 'Clapp Favorite' (254)	Weak growth, brittle union

ROOTSTOCK	SCION	REMARKS
	<i>P. communis</i> 'Cheltetham Cross' (189)	Suggest incompatibility
	<i>P. communis</i> 'Comice' (189), <i>P. c.</i> 'Cure' (146, 254)	
	<i>P. communis</i> 'Dr. Stark' (189)	Suggested incompatibility
	<i>P. communis</i> 'Hardy' (254)	
	<i>P. communis</i> 'Idaho' (189)	Suggest incompatibility
	<i>P. communis</i> 'John Innis 3828' (189), <i>P. c.</i> 'Ovid' (189)	
<i>Cydonia oblonga</i> 'Quince A' (clonal) (not virus free)	<i>P. communis</i> 'Conference' (254)	60% take
<i>Cydonia oblonga</i> 'Quince A' (clonal) (virus free)	<i>P. communis</i> 'Bartlett' (Virus free) (254)	
	<i>P. communis</i> 'Conference' (254)	95% take
<i>Cydonia oblonga</i> 'Quince A'	<i>P. communis</i> 'Bartlett-Max Red' (285), <i>P. c.</i> 'Red Flesh' (285)	
<i>Cydonia oblonga</i> 'Quince C' (clonal)	<i>P. communis</i> 'Cure' (146)	
<i>Cydonia oblonga</i> 'S1'	<i>P. communis</i> unspecified (233)	Compatible with most varieties
<i>Cydonia oblonga</i> 'S2'	<i>P. communis</i> unspecified (233)	Compatible with most varieties
<i>Cydonia oblonga</i> unspecified	<i>P. communis</i> 'Bartlett' (211), <i>P. c.</i> 'Bosc' (211)	Incompatible
<i>Cydonia oblonga</i> unspecified/ <i>Pyrus communis</i> 'Anjou'	<i>P. communis</i> 'Bartlett' (277)	
<i>Cydonia vulgaris</i>	<i>P. communis</i> 'Bartlett' (239), <i>P. c.</i> 'Beurre Superfin' (239), <i>P. c.</i> 'Coscia Precoce' (239), <i>P. c.</i> 'Gentile Bianca' (239), <i>P. c.</i> 'Packham's Triumph' (239)	Delayed incompatibility and decline
<i>Malus adstringens</i> 'Angus'	<i>P. ovoidea</i> (56)	Low take, weak unions
<i>Malus adstringens</i> 'Columbia'	<i>P. communis</i> 'Golden Spice' (56), <i>P. ovoidea</i> 'Bantam' (56), <i>P. o.</i> 'Tait Dropmore' (56)	Weak union, delayed incompatibility
<i>Photinia villosa</i>	<i>P. unspecified</i> (211)	Poor compatibility
<i>Pyronia veitchi</i>	<i>P. unspecified</i> (211)	
<i>Pyronia veitchi</i> / <i>Malus pumila</i>	<i>P. unspecified</i> (211)	
<i>Pyrus calleryana</i>	<i>P. calleryana</i> 'Bradford' (7), <i>P. kawakami</i> (95, 220)	
<i>Pyrus calleryana</i> (clonal)	<i>P. kawakami</i> (95)	
<i>Pyrus calleryana</i> 'Bradford'	<i>P. communis</i> 'Atlantic Queen' (285), <i>P. c.</i> 'Bartlett' (Stewart) (285), <i>P. c.</i> 'Carisi' (285), <i>P. c.</i> 'New Jersey 487603601' (285), <i>P. c.</i> 'New Jersey 5001480961' (285), <i>P. c.</i> 'New Jersey 501971234' (285), <i>P. c.</i> 'New Jersey 506148917' (285), <i>P. c.</i> 'Paili' (285)	
<i>Pyrus calleryana</i> 'D6'	<i>P. unspecified</i> (94)	

ROOTSTOCK	SCION	REMARKS
<i>Pyrus calleryana</i> 'D6' (clonal)	<i>P.</i> unspecified (94)	
<i>Pyrus calleryana</i> 'McGrew'	<i>P. communis</i> 'Bartlett' (285), <i>P. c.</i> 'Dawn' (285), <i>P. c.</i> 'Magness' (285), <i>P. c.</i> 'Moonglow' (285)	
<i>Pyrus communis</i> 'Alamu'	<i>P. communis</i> 'Cure' (199)	
<i>Pyrus communis</i> 'Anjou'/ <i>Cydonia</i> <i>oblonga</i> 'Quince A'	<i>P. communis</i> 'Bartlett' (117), <i>P. c.</i> 'Bosc' (117)	
<i>Pyrus communis</i> 'Augustbirne'/ unspecified	<i>P. communis</i> unspecified (47)	
<i>Pyrus communis</i> 'Bartholomaus'/ unspecified	<i>P. communis</i> unspecified (47)	
<i>Pyrus communis</i> 'Bartlett'	<i>P. communis</i> (574 budded varieties, 10 grafted varieties, 83 budded seedlings, 98 grafted seedlings, 71 species) (285)	
	<i>P. kawakami</i> (220)	Red-leaf susceptible
	<i>P. kawakami</i> (1, 130), <i>P. unspeci-</i> <i>fied</i> (36)	
<i>Pyrus communis</i> 'Bertrams' stamm- bildner/Unspecified	<i>P. communis</i> unspecified (234)	
<i>Pyrus communis</i> 'Couturier'/ <i>P. communis</i>	<i>P. communis</i> standard varieties (194)	
<i>Pyrus communis</i> 'Duchess d' An- gouleme'/ <i>Cydonia</i> <i>oblonga</i> 'Quince A'	<i>P. communis</i> 'Bartlett' (117), <i>P. c.</i> 'Bosc' (117)	
<i>Pyrus communis</i> 'French Sdlg'	<i>P.</i> unspecified (13, 36)	
<i>Pyrus communis</i> 'Hardy'/ <i>Cydonia</i> <i>oblonga</i>	<i>P. communis</i> 'Bartlett' (27, 211), <i>P.</i> <i>c.</i> 'Bosc' (211)	
<i>Pyrus communis</i> 'Hardy'/ <i>Cydonia</i> <i>oblonga</i> 'Quince A'	<i>P. communis</i> 'Bartlett' (117), <i>P. c.</i> 'Bosc' (117), <i>P. c.</i> 'Cheltet- ham Cross' (189), <i>P. c.</i> 'Comice' (189), <i>P. c.</i> 'Dr. Stark' (189), <i>P.</i> <i>c.</i> 'Idaho' (189), <i>P. c.</i> 'John Innes 3828' (189), <i>P. c.</i> 'Ovid' (189)	
<i>Pyrus communis</i> 'Magness'	<i>P. communis</i> 'Bartlett 4X' (285), <i>P.</i> <i>c.</i> 'Fertility 4X' (285), <i>P. c.</i> 'Krol Solioski' (285)	
<i>Pyrus communis</i> 'Neue Porteau'/ Unspecified	<i>P. communis</i> unspecified (234)	
<i>Pyrus communis</i> 'Old Home'/ <i>Cydonia oblonga</i>	<i>P. communis</i> 'Bartlett' (27, 117, 158), <i>P. c.</i> 'Bosc' (117)	
<i>Pyrus communis</i> 'Oregon 18'/ <i>P. communis</i> 'Oregon 18' x <i>P. c.</i> 'Farmingdale'	<i>P. communis</i> 'Anjou' (109), <i>P. c.</i> 'Bartlett' (109), <i>P. c.</i> 'Bosc' (109), <i>P. c.</i> 'Comice' (109)	Incompatible between interstock rootstock

ROOTSTOCK	SCION	REMARKS
<i>P. communis</i> 'P87' / <i>P. communis</i> 'Oregon 18' x <i>P. c.</i> 'Farmingdale'	<i>P. communis</i> 'Anjou' (109), <i>P. c.</i> 'Bartlett' (109), <i>P. c.</i> 'Bosc' (109)	
<i>Pyrus communis</i> 'P87' / <i>P. communis</i> 'Oregon 18' x <i>P. c.</i> 'Farmingdale'	<i>P. communis</i> 'Forelle' (109)	Incompatibility between scion and interstock
<i>Pyrus communis</i> unspecified	<i>P. calleryana</i> (215), <i>P. c.</i> 'Brad- ford' (139), <i>P. kawakami</i> (214)	
<i>Pyrus serotina</i>	<i>P. unspecified</i> (13) <i>P. unspecified</i> (22)	Decline susceptible Red-leaf susceptible
<i>Pyrus ussuriensis</i>	<i>P. unspecified</i> (13) <i>P. unspecified</i> (22)	Decline susceptible Red-leaf susceptible
<i>Pyrus unspecified</i> 'Wild Pear'	<i>P. communis</i> 'Cure' (199)	
<i>Sorbus torminalis</i>	<i>P. communis</i> 'Limonka' (159)	
QUERCUS		
<i>Quercus alba</i>	<i>Q. alba</i> group (231), <i>Q. borealis</i> group (177) <i>Q. pontica</i> (80) <i>Q. velutina</i> group (231)	Not successful
<i>Quercus borealis</i>	<i>Q. palustris</i> (214)	
<i>Quercus</i> <i>castaneaefolia</i>	<i>Q. suber</i> (231)	
<i>Quercus cerris</i>	<i>Q. cerris variegata</i> (116)	
<i>Quercus</i> <i>chrysolepsis</i>	<i>Q. suber</i> (231)	
<i>Quercus coccinea</i>	<i>Q. coccinea splendens</i> (116)	
<i>Quercus lyrata</i>	<i>Q. virginiana</i> x <i>Q. lyrata</i> 'Ness hybrids' (231)	No take in budding but grafting would seem to be successful in some of these combinations
<i>Quercus macrocarpa</i>	<i>Q. virginiana</i> x <i>Q. lyrata</i> 'Ness hybrids' (231)	No take in budding but grafting would seem to be successful in some of these combinations
<i>Quercus nigra</i>	<i>Q. regia</i> (116) <i>Q. virginiana</i> x <i>Q. lyrata</i> 'Ness hybrids' (231)	Incompatibility after 25 years No take in budding but grafting would seem to be successful in some of these varieties
<i>Quercus palustris</i>	<i>Q. borealis</i> group (231) <i>Q. borealis</i> (80), <i>Q. coccinea</i> (80), <i>Q. imbericaria</i> (80) <i>Q. kelloggii</i> (116) <i>Q. palustris</i> (31) <i>Q. robur fastigiata</i> (263) <i>Q. scochiana</i> (116), <i>Q. texana</i> (116) <i>Q. virginiana</i> x <i>Q. lyrata</i> 'Ness hybrids' (231)	Very low bud take Very low bud take Unsatisfactory No take in budding but grafting would seem to be successful in some of these combinations

ROOTSTOCK	SCION	REMARKS
<i>Quercus pedunculosa</i>	<i>Q. pedunculosa fastigiata</i> (142), <i>Q. petraea columnaris</i> (142)	
<i>Quercus pubescens</i>	<i>Q. suber</i> (231)	
<i>Quercus phellos</i>	<i>Q. phellos</i> x <i>Q. ludoviciana</i> hybrids (116)	
	<i>Q. virginiana</i> x <i>Q. lyrata</i> 'Ness hybrids' (231)	No take in budding but grafting would seem to be successful in some of these combinations
<i>Quercus regia</i>	<i>Q. regia</i> (116)	
<i>Quercus robur</i>	<i>Q. alba</i> group (177), <i>Q. castanaefolia</i> (116)	
	<i>Q. coccinea splendens</i> (80)	Only 25%
	<i>Q. libani</i> (116), <i>Q. robur fastigiata</i> (263)	
	<i>Q. virginiana</i> x <i>Q. lyrata</i> 'Ness hybrids' (231)	No take in budding but grafting would seem to be successful in some of these combinations
<i>Quercus rubra</i>	<i>Q. coccinea splendens</i> (116)	Not as good as <i>Q. coccinea</i>
<i>Quercus stellata</i>	<i>Q. virginiana</i> (231)	Delayed incompatibility
	<i>Q. virginiana</i> x <i>Q. lyrata</i> 'Ness hybrids' (231)	No take in budding but grafting would seem to be successful in some of these combinations
<i>Quercus velutina</i>	<i>Q. alba</i> group (231), <i>Q. velutina</i> group (231), <i>Q. velutina rubifolia</i> (116)	
<i>Quercus virginiana</i>	<i>Q. virginiana</i> x <i>Q. lyrata</i> 'Ness hybrids' (231)	No take in budding but grafting would seem to be successful in some of these combinations
RHODODENDRON		
<i>Rhododendron catawbiensis</i>	<i>R. catawbiensis</i> varieties (263) <i>R. unspecified</i> varieties (156)	Very poor take
<i>Rhododendron catawbiensis</i> 'Cunningham White'	<i>R. catawbiensis</i> varieties (263), <i>R. unspecified</i> varieties (45, 156)	
<i>Rhododendron decorum</i>	<i>R. fortunei</i> series (45)	
<i>Rhododendron fortunei</i>	<i>R. fortunei</i> series (45)	
<i>Rhododendron luteum</i>	<i>R. gandavense</i> varieties (232), <i>R. molle</i> varieties (50, 232), <i>R. ponticum</i> varieties (50), <i>R. rustica</i> varieties (50)	
<i>Rhododendron maximum</i>	<i>R. unspecified</i> (138)	
<i>Rhododendron molle</i>	<i>R. gandavense</i> varieties (263)	
<i>Rhododendron mucronatum</i>	<i>R.</i> (complex hybrids) 'Belgian' and 'Indian' forcing varieties (232)	
<i>Rhododendron pentaphyllum</i>	<i>R. pentaphyllum</i> (116)	Alright, but delayed incompatibility on other species

ROOTSTOCK	SCION	REMARKS
<i>Rhododendron ponticum</i>	<i>R. caracatum</i> (131), <i>R. catawbiense alba</i> (131), <i>R. c.</i> 'Dr. H. C. Dresselhuy's' (131), <i>R. c.</i> 'English Roseum' (131), <i>R. c.</i> 'Ignatius Sargenti' (131), <i>R. c.</i> 'Lee's Dark Purple' (131), <i>R. c.</i> 'Mrs. C. S. Sargent' (131), <i>R. c. grandiflora</i> (131)	Weak unions, virus suspected, discontinued
	<i>R. catawbiense</i> varieties (263)	Take satisfactory, rootstocks wilt
	<i>R. lacteum</i> (116)	Incompatible
	<i>R. loderi</i> (116)	
	<i>R. unspecified</i> 'Grande' and 'Sinogrande' (116)	Incompatible
	<i>R. unspecified</i> 'Barbaratum', 'Barclayi' and 'Thompsoni' (116)	Difficult
	<i>R. unspecified</i> (138)	Disease problem
	<i>R. unspecified</i> (97, 156)	
<i>Rhododendron poticum</i> 'Hoogendijk'	<i>R. catawbiense</i> varieties (263)	
<i>Rhododendron pulchrum phoeniceum</i>	<i>R. indicum</i> varieties (50), <i>R. rutherfordiana</i> varieties (50)	
<i>Rhododendron schlippenbachii</i>	<i>R. schlippenbachii</i> (116)	Alright but incompatible with other species
<i>Rhododendron unspecified</i> 'Formosa'	<i>R. argustinii</i> x <i>R. impeditum</i> 'Blue Tit' (262)	No success
ROBINIA:		
<i>Robinia pseudoacacia</i>	<i>R. hispida</i> (142), <i>R. pseudoacacia</i> (185), <i>R. p. fastigiata</i> (142), <i>R. p. inermis</i> (142), <i>R. p. tortuosa</i> (142)	
ROSA:		
<i>Chaenomeles japonica</i>	<i>R. multiflora</i> (71)	No success
<i>Malus pumila</i>	<i>R. multiflora</i> (71)	No success
<i>Rosa canina</i>	<i>R. unspecified</i> (186, 260)	
	<i>R. unspecified</i> (144)	Unsuitable in Algeria
<i>Rosa canina</i> 'Heinsohns Rekord'	<i>R. unspecified</i> (260)	
<i>Rosa canina</i> 'Inermis I'	<i>R. unspecified</i> (260)	
<i>Rosa canina</i> 'Inermis II'	<i>R. unspecified</i> (260)	
<i>Rosa canina</i> 'Kokulinsky'	<i>R. unspecified</i> (260)	
<i>Rosa canina</i> 'Pfander'	<i>R. unspecified</i> (260)	
<i>Rosa canina</i> 'Pollmers'	<i>R. unspecified</i> (260)	
<i>Rosa fortuneana</i>	<i>R. unspecified</i> (154)	
<i>Rosa indica major</i>	<i>R. unspecified</i> (144)	
<i>Rosa hybrid</i> 'Dr. Hewy'	<i>R. unspecified</i> (101, 154)	

ROOTSTOCK	SCION	REMARKS
<i>Rosa multiflora</i>	<i>R. multiflora</i> (4) <i>R. unspecified</i> (210, 232)	75% take
<i>Rosa multiflora</i> 'Burr'	<i>R. unspecified</i> (212)	
<i>Rosa multiflora</i> 'Clark'	<i>R. unspecified</i> (212)	
<i>Rosa multiflora</i> (thornless)	<i>R. unspecified</i> climbing roses (15)	
<i>Rosa noisettiana</i> 'Manetti'	<i>R. unspecified</i> 'Golden Rapture' (101)	Off color
	<i>R. unspecified</i> 'Golden Wave' and 'Rose Elf' (101)	Decline
	<i>R. unspecified</i> greenhouse roses (268)	
<i>Rosa odorata</i>	<i>R. unspecified</i> 'Golden Rapture' and 'Golden Wave' (101)	
<i>Rosa rugosa</i>	<i>R. unspecified</i> (26)	
<i>Rosa rubiginosa</i>	<i>R. unspecified</i> 'The Fairy' (185)	
<i>Sorbus aucuparia</i>	<i>R. unspecified</i> (71)	No success
SAMBUCUS.		
<i>Sambucus nigra</i>	<i>S unspecified</i> (97)	
<i>Sambucus racemosa</i>	<i>S. unspecified</i> (97)	
SCIADOPETYS		
<i>Chamaecyparis</i> <i>pisifera</i>	<i>S. verticillata</i> (269)	No success
<i>Cryptomeria</i> <i>japonica</i>	<i>S. verticillata</i> (269)	
	<i>S. verticillata</i> (263)	Unsatisfactory union
<i>Cryptomeria</i> <i>japonica elegans</i>	<i>S. verticillata</i> (269)	No success
<i>Thuja occidentalis</i>	<i>S. verticillata</i> (269)	No success
SORBARONIA		
<i>Aronia arbutifolia</i>	<i>S. fallax</i> (285)	
SOPHORA		
<i>Sophora japonica</i>	<i>S. japonica pendula</i> (263) <i>S. unspecified</i> (97)	Suspect virus
<i>Sophora unspecified</i>	<i>S. japonica columnaris</i> (79), <i>S. j.</i> <i>violaces</i> (79)	
SORBUS.		
<i>Crataegus oxya-</i> <i>cantha</i>	<i>S. aria latifolia</i> (194), <i>S. aucuparia</i> (194), <i>S. domestica</i> (194)	
<i>Crataegus unspeci-</i> <i>fied</i>	<i>S. aria</i> (97, 116)	
<i>Sorbus alnifolia</i>	<i>S. epidendron</i> (79), <i>S. folgneri</i> (79)	
<i>Sorbus americana</i>	<i>S. aria lutescens</i> (185), <i>S. unspeci-</i> <i>fied</i> (97)	
<i>Sorbus aucuparia</i>	<i>S. aucuparia</i> (71), <i>S. a. pendula</i> (142), <i>S. unspecified</i> (97, 185)	
<i>Sorbus intermedia</i>	<i>S. aucuparia pendula</i> (142)	
<i>Sorbus meliosmi-</i> <i>folia/Crataegus</i> <i>unspecified</i>	<i>S. epidendron</i> (79), <i>S. folgneri</i> (79)	

ROOTSTOCK	SCION	REMARKS
<i>Syringa theurgí</i>	<i>S. unspecified</i> (185)	
<i>Syringa tomentella</i>	<i>S. unspecified</i> (185)	
<i>Syringa villosa</i>	<i>S. unspecified</i> (185)	
<i>Syringa vulgáris</i>	<i>S. vulgáris</i> clones (37, 185, 286)	
SYRINGA:		
<i>Fraxinus pennsylvanica</i>	<i>S. villosa</i> (277)	Shields knitted, buds failed
<i>subintegerrima</i>	<i>S. vulgáris</i> clones (185, 270), <i>S. unspecified</i> (58 varieties) (271)	
<i>Fraxinus unspecified</i>	<i>S. unspecified</i> hybrids (156)	
<i>Ligustrum amurensis</i> 'Amur River North' (Clonal)	<i>S. palibiniana</i> (7)	
<i>Ligustrum ovalifolium</i>	<i>S. unspecified</i> clones (185) <i>S. 101</i> varieties listed (261)	Short-lived All deemed compatible
<i>Ligustrum vulgáris</i>	<i>S. unspecified</i> (97, 279)	
<i>Ligustrum unspecified</i>	<i>S. unspecified</i> (156, 185)	
<i>Syringa amurensis japonica</i>	<i>S. vulgáris</i> clones (37) <i>S. vulgáris</i> (211) <i>S. unspecified</i> (185)	Percentage low Dwarf, short-lived
<i>Syringa chinensis</i>	<i>S. oblata dilatata</i> (277), <i>S. o. d. #8894'</i> (277), <i>S. o. d. #9446'</i> (277), <i>S. o. d. #9449'</i> (277)	Survived only first year
<i>Syringa persica alba</i>	<i>S. amurensis</i> (277)	Buds took, remained dormant on uncut stock
THUJA:		
<i>Juniperus chinensis hetzi</i>	<i>T. occidentalis</i> 'Techny' (185)	
TAXUS:		
<i>Taxus baccata</i>	<i>T. media</i> (263)	
<i>Taxus cuspidata</i>	<i>T. media</i> (263)	Satisfactory on young rootstocks
TILIA:		
<i>Tilia americana</i>	<i>T. euchlora</i> 'Redmond' (185)	
<i>Tilia cordata</i>	<i>T. cordata</i> 'Greenspere' (185)	
<i>Tilia platyphyllos</i>	<i>T. platyphyllos laciniata</i> (263)	
<i>Tilia vulgans</i>	<i>T. euchlora</i> (185)	
TSUGA:		
<i>Tsuga canadensis</i>	<i>T. canadensis</i> (263), <i>T. pendula sargentii</i> (156)	
ULMUS:		
<i>Celtis occidentalis</i>	<i>U. americana</i> (277)	Shields knitted, buds failed or were overgrown
<i>Ulmus americana</i>	<i>U. americana aurea</i> (263) <i>U. americana</i> 'Lake City' (185) <i>U. glabra pendula</i> (263)	Fair
<i>Ulmus parvifolia</i>	<i>U. unspecified</i> hybrids (185)	

ROOTSTOCK	SCION	REMARKS
<i>Ulmus pumila</i>	<i>U.</i> unspecified hybrids (185)	
<i>Ulmus</i> unspecified	<i>U. glabra pendula</i> (142), <i>U. g. umbracifolia</i> (142)	
VIBURNUM:		
<i>Viburnum dentatum</i>	<i>V. bodnantense</i> (156), <i>V. burkwoodi</i> (156, 263)	
	<i>V. carcephalum</i> (185)	Poor union
	<i>V. carlesi</i> (156, 263), <i>V. juddii</i> (185)	
	<i>V. unspecified</i> (115)	
<i>Viburnum dilatatum</i>	<i>V. carlesi</i> (263), <i>V. burkwoodi</i> (263)	
<i>Viburnum lantana</i>	<i>V. carcephalum</i> (185), <i>V. carlesi</i> (185, 194), <i>V. unspecified</i> (97, 115)	
<i>Viburnum opulus nana</i>	<i>V. dentatum</i> (277), <i>V. lentago</i> (277)	No take
	<i>V. opulus</i> (277)	Seemed to knit but sloughed off
VITIS		
<i>Vitis aestivalis</i> x <i>V. vinifera</i> 'Jacques'	<i>V. vinifera</i> 'Alphonse Lavallee' (160), <i>V. v.</i> 'Waltham Cross' (160)	
<i>Vitis berlandieri</i> x <i>V. riparia</i> '5BB'	<i>V. unspecified</i> (163)	
<i>Vitis berlandieri</i> x <i>V. riparia</i> '420A'	<i>V. unspecified</i> (52, 163)	
<i>Vitis berlandieri</i> x <i>V. rupestris</i> 'Richter 99'	<i>V. vinifera</i> 'Alicante' (62), <i>V. v.</i> 'Alphonse Lavallee' (160), <i>V. v.</i> 'Santarom' (62), <i>V. v.</i> 'Tinto' (62), <i>V. v.</i> 'Tinto Miuda' (62), <i>V. v.</i> 'Waltham Cross' (160)	
<i>Vitis berlandieri</i> x <i>V. rupestris</i> 'Richter 110'	<i>V. vinifera</i> 'Alicante' (62), <i>V. v.</i> 'Ansaut Droit' (200), <i>V. v.</i> 'Ansaut Fria' (200), <i>V. v.</i> 'Dame Noire' (200), <i>V. v.</i> 'Granache' (200), <i>V. v.</i> 'Santarom' (62), <i>V. v.</i> 'Syrah' (200), <i>V. v.</i> 'Tinto' (62), <i>V. v.</i> 'Tinto Miuda' (62)	
<i>Vitis riparia</i>	<i>V. unspecified</i> 'Athens' (103)	
<i>Vitis riparia</i> 'Beta'	<i>V. unspecified</i> 'Athens' (103)	
<i>Vitis riparia</i> 'Glorie de Montpellier'	<i>V. unspecified</i> (52)	
<i>Vitis riparia</i> x <i>V. berlandieri</i> 'Teleki 8B'	<i>V. vinifera</i> 'Alphonse Lavallee' (160), <i>V. v.</i> 'Rheinreising' (21), <i>V. v.</i> 'Waltham Cross', (160), <i>V. unspecified</i> (52)	
<i>Vitis riparia</i> x <i>V. rupestris</i> 'Bzenec'	<i>V. vinifera</i> 'Rheinreising' (21)	Poor compatibility
<i>Vitis riparia</i> x <i>V. rupestris</i> 'Couderc 3306'	<i>V. vinifera</i> 'Alphonse Lavallee' (160), <i>V. v.</i> 'Waltham Cross' (160)	
<i>Vitis riparia</i> x <i>V. rupestris</i> 'Couderc 3309'	<i>V. vinifera</i> 'Ansaut Droit' (200), <i>V. v.</i> 'Ansaut Fria' (200), <i>V. v.</i> 'Dame Noire' (200), <i>V. v.</i> 'Granache' (200), <i>V. v.</i> 'Syrah' (200)	
<i>Vitis riparia</i> x <i>V. rupestris</i> '101-14'	<i>V. vinifera</i> 'Alphonse Lavallee' (160), <i>V. v.</i> 'Waltham Cross' (160)	
<i>Vitis rupestris</i> 'Deu Lot'	<i>V. vinifera</i> 'Alicante' (62), <i>V. v.</i> 'Santarom' (62), <i>V. v.</i> 'Tinto' (62), <i>V. v.</i> 'Tinto Miuda' (62)	

ROOTSTOCK	SCION	REMARKS
<i>Vitis vinifera</i> x <i>V. berlandieri</i> '41B'	<i>V. vinifera</i> 'Ansaut Droit' (200), <i>V. v.</i> 'Ansaut Fria' (200), <i>V. v.</i> 'Dame Noire' (200), <i>V. v.</i> 'Granache' (200), <i>V. v.</i> 'Syrah' (200), <i>V. unspecified</i> (52, 163)	
<i>Vitis vinifera</i> x <i>V. riparia</i> '143B'	<i>V. vinifera</i> 'Alphonse Lavallee' (160), <i>V. v.</i> 'Waltham Cross' (160)	
<i>Vitis unspecified</i> 'American rootstocks and hybrids'	<i>V. vinifera</i> 'Sultana' (239)	Incompatibility and breakage
<i>Vitis unspecified</i> 'Cracinel 2'	<i>V. unspecified</i> (52)	
<i>Vitis unspecified</i> 'SOR'	<i>V. vinifera</i> 'Ansaut Droit' (200), <i>V. v.</i> 'Ansaut Fria' (200), <i>V. v.</i> 'Dame Noire' (200), <i>V. v.</i> 'Granache' (200), <i>V. v.</i> 'Syrah' (200)	
WEIGELA		
<i>Viburnum lantana</i>	<i>W. vaniciki</i> (277)	No take, difficult to work
WISTERIA.		
<i>Wisteria floribunda</i>	<i>W. floribunda</i> (215)	
<i>Wisteria multijugata</i>	<i>W. floribunda</i> (7)	
<i>Wisteria sinensis</i>	<i>W. floribunda</i> varieties (263), <i>W. venusta</i> (74), <i>W. unspecified</i> vine and tree types (156)	
ZELKOVA.		
<i>Ulmus unspecified</i>	<i>Z. unspecified</i> (97)	

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LITERATURE CITED

1. Abeygunawardena, T. V. W. and H. M. E. Herath 1962. Stock-scion reaction of citrus to quick-decline disease in Ceylon. 1. The present status of stock-scion experiments at Bibile. Trop. Agr., 118: 3-13. (H. A. 34-1437)
2. Agrios, G. N. 1961. Factors conducive to poor stock-scion union and virus-like symptom development in dwarf peach. Diss. Abstr., 21: 2848-9
3. Ally, C. J. 1965. Bark grafting grape vines at high and low levels. Calif. Agric., 19(3):14-15. (H. A. 35-5307)
4. Anderson, E. T. 1964. Stock-scion relationships. Proc. Plant Propagators' Soc., 14:104-107.
5. Andronov, P. 1962. The search for a winter-hardy dwarfing rootstock. (Russian) Sadovodstvo, 5:22-3. (H. A. 32-6031)
6. Anon, 1960. Institutet for Vaxtforadling av Frukt och Bar. Berattelse over verksamheten ar 1960. (Annual Report of Balsgard Fruit Breeding Institute for 1960) pp.32. (H. A. 32-219)
7. Anon, 1967. Rootstock survey correspondence. (Monrovia Nursery Company, Azusa, California, U.S.A.)
8. Argles, G. K. 1937. A review of the literature on stock-scion incompatibility in fruit trees, with particular reference to pome and stone fruits. Tech. Commun. Imp. Bur. Fruit Prod., 9.
9. Arhipov, V. S. 1960. Cherry plum (*Prunus cerasifera*) as a rootstock for plums in the central region of the R.S.F.S.R. (Russian) Agrobiologija, 3:464-5. (H. A. 31-3891)
10. Armasescu, I. and I. Poenaru 1967. Obtinerea vitelor altoite nefortate, prin folosirea polietilenei. (Unforced grape vine grafts propagated under polyethylene shelters). Rev. Hort. Vitic., 16(4): 39-44. (H. A. 38-560)
11. Aubin, L. 1967. Rootstock survey correspondence. (Aubin Nurseries, Carmen, Manitoba, Canada)
12. Banbukov, P. and V. Vasilev 1964. The growth and fruiting of some apple varieties on seedlings and vegetatively propagated rootstocks. (Bulgarian) Grad. lozar. Nauka, 1(4):11-26. (H. A. 35-5046)
13. Batjer, L. P. and H. Schneider 1960. Relation of pear decline to rootstock and sieve-tube necrosis. Proc. Amer. Soc. Hort. Sci., 76:85-97.
14. Baumann, G. and H. Lemmich 1965. Das Stammnarben-virus des apfels in Deutschland. (Apple stem pitting virus in Germany) ErwObstb., 7:123-6. (H. A. 35-7492).
15. Bedger, R. C. 1967. Rootstock survey correspondence. (Musser Forests Inc., Indiana, Pennsylvania, U.S.A.)
16. Bernhard, R. 1962. Les hybrids prunier x pecher et prunier x amandier. Principales caracteristiques comportement comme porte-greffes eventuels du pecher. (Plum-peach and plum-almond hybrids. their principle characteristics and behaviour as possible rootstocks for peach). Proc. XV Int. Hort. Congr., Nice 1958, Vol. 2, pp. 72-86.
17. Binstadt, A. 1960. Erfahrungen mit Amerikanerunterlagen. (Trials with American rootstocks). Dtsch. Weinb., 15:924-7. (H. A. 32-2638)
18. Bitters, W. P. 1961. The rootstock situation. West. Fruit Gr., 15(8): 17-19. (H. A. 32-1668)
19. Bitters, W. P. 1964. Citrus rootstocks and nursery practices in Japan. Calif. Citrogr., 49:205-210. (H. A. 34-5539)
20. Blacker, G. W. J. 1960. Grafting passionfruit vines. N. Z. J. Agric., 101:401-5 (H. A. 31-3212)

21. Blaha, J. 1967. Zehnjährige Affinitätsversuche mit Rheinriesling. (Ten-year affinity tests with Rheinriesling) Mitt. Klosterneuberg, 17 5-9 (H. A. 37-6508)
22. Blodgett, E. C. and M. D. Aichelle 1960. The association of red-leaf condition of pear trees with pear decline. Plant Dis. Repr. 44:904-7.
23. Blomme, R. and J. van Hulle 1967. De vegetatieve vermenigvuldiging van boomkivekerijgewassen. *Chamaecyparis nootkatensis*. (Vegetative propagation of trees. *Chamaecyparis nootkatensis*). Meded. BedrVoorl 'Dienst. Oost-Vlaandersen, 42, pp. 5. (H. A. 38-3900)
24. Bonfante, S. 1964. I portainneste clonali del melo. (Clonal rootstocks for apples). Inf. agrar Verona, No. 4, pp. 3 (H. A. 37-6239)
25. Boyce, B. R. and R. J. Hopp 1963. Semi-dwarf apple trees. Performance of several rootstock-interstock combinations. Bull. Vt. Agric. Exp. Stat., 633, pp. 23.
26. Briggs, B. 1964. A selection of plants from the Northwest. New, unusual and worthy of wider use. Proc. Plant Prop. Soc., 14:295-297..
27. Brooks, K. 1963. Double-budding pear trees. Proc. Plant Propagator's Soc., 13:242-244.
28. Bryner, W. 1964. Walnussveredlung. (Grafting Walnuts). Schwiez. Z. Obst- u. Weinb., 73 383-389. (H. A. 35-3091)
29. Buchloh, G. 1962. Union formation and disturbances at the union as an expression of the degree of incompatibility in grafts of pear varieties on *Cydonia oblonga*. (German) Beitr, Biol. Pfl., 37 183-240. (H. A. 33-2276)
30. Buchloh, G. 1962. Zur Physiologie der Unverträglichkeit von Birnen/Quitten-Veredlungen. Proc. XV Int. Hort. Congr., Nice, 1958, 2:28-32.
31. Buckley, A. R. 1957. The grafting of *Juniperus virginiana* varieties on unrooted cuttings. Proc. Plant Propagators' Soc., 7:81-83.
32. Burton, J. H. 1952. The grafting of some maples. Proc. Plant Propagators' Soc., 2:71-73.
33. Campbell, A. I. 1960. Apomictic seedling rootstocks for apples, Progress report II. Ann. Rep't Long Ashton Agric. Hort. Res. Stat. for 1959, 50-56.
34. Carlson, H. 1965. "Discussion". Proc. Plant Propagators' Soc., 15 326.
35. Carlson, R. F. 1965. The effects and relationships of intermediate stem sections on growth and behaviour of apple cultivars. Proc. Amer. Soc. Hort. Sci., 87:21-28.
36. Camefix, W. 1964. Yearling fruit tree raising in Idaho. Proc. Plant Propagators' Soc., 14:259-261.
37. Caron, J. E. A. 1959. Proeven met seringe-onderstammen. (Trials with lilac rootstocks). Jaarb. Proefst. Boomkw. Boskoop, 45-47. (H. A. 31-1202)
38. Carville, L. 1967. Rootstock survey correspondence (Rhode Island Nurseries Inc., Newport, Rhode Island, U.S.A.)
39. Catavela, S. and E. Manugheviçi 1966. Stabilirea celor mai buni intermediari pentru citeva soiuri valoroase de mar (Determining the best interstock for certain valuable apple varieties). Lucr. sti Inst. Cerc. hortivitic., 1963-1964, 7.395-411. (H. A. 37-2269)
40. Cesarini, J. 1966. Propagation of dwarf conifers. Proc. Plant Propagators' Soc., 16:210-213.
41. Chadwick, L. C. 1967. Rootstock survey correspondence. (The Ohio State University, Columbus, Ohio, U.S.A.)
42. Chandra, R. 1961. Budding in bougainvilleas. Indian Hort., 5(4) 18-19. (H. A. 32-3387)

43. Chang, W. T. 1937. Studies in incompatibility between stock and scion, with special reference to certain deciduous fruit trees. *J. Pomol.*, 15:267-325.
44. Chohan, G. S., J. C. Bakshi and J. P. Nauriyal 1967. Prebearing performance of sweet orange (*Citrus sinensis* Osbeck) varieties in the arid irrigated areas of Punjab. *J. Res., Ludhiana.* 4:68-72. (H. A. 38-1842)
45. Clarke, J. H. 1968. Rootstock survey correspondence. (Horticulture Specialist, Long Beach, Washington, U.S.A.)
46. Cohen, A. 1967. The relationship between seedling stem diameter and bud-take in citrus. *Israel J. Agric. Res.*, 17:29-37. (H. A. 37-7688)
47. Cohen, M. and H. G. Reitz 1964. Rootstocks for Valencia oranges and Red Ruby grapefruit Results of a trial initiated at Fort Pierce in 1950 on two soil types. *Proc. Fla. St. Hort. Soc.*, 76:29-34. (H. A. 34-7500)
48. Cojenanu, N. and D. Tessu 1963. Aspecte anatomo-fiziologice ale concresterii dintre cais si portaltouil prun. (Anatomical and physiological aspects of the union between an apricot scion and a plum rootstock). *Lucr. sti. Inst. agron. Iasi*, 165-9. (H. A. 34-6295)
49. Collins, R. P. 1960. Graft failures of *Cornus florida*. *Amer. Nurseryman*, 122(4) 12,44.
50. Conklin, E. L. 1954. Azaleas from grafts. *Proc. Plant Propagators' Soc.*, 4:148-151.
50. Cook, A. D. 1967. Rootstock survey correspondence. (Freehold, New Jersey, U.S.A.)
52. Constantinescu, G. 1963. Aspect scientifique des rapports mutuels entre porte-greffes et greffons. (Scientific aspects of the mutual relationship between rootstocks and scions). *Bull. Off. int. Vin*, 36:1143-1164. (H. A. 34-4430)
53. Copes, D. 1968. Graft incompatibility in Douglas Fir. *Proc. International Plant Propagators' Soc.*, 17:130-138.
54. Cristoferrì, G., O. Fabberì and G. Pernicone 1963. Correlations between vigor, water conductivity and anatomical structure in the stems of apple rootstocks EM IX and EM IV. (Italian) *Riv. Ortoflorofruttic ital.*, 47:146-150. (H. A. 33-6706)
55. Csepregi, P. and J. Zibai 1961. Alanyfajtak hatasa a raoltott szolofajta termekenysegere es novekedsi erelyere (Elozetes Kozlemeny). (The effect of rootstock varieties on the productivity and vigour of vines (Preliminary communication). *Kert. Szol Foisik Evk.*, 25(9):83-96. (H. A. 32-6231)
56. Cumming, W. A. 1967. Rootstock survey correspondence. (Research Station, Morden, Manitoba, Canada)
57. Curtis, W. J. 1962. The grafting of Koster blue spruce, *Cedrus atlantica glauca*, Copper beech, Pink and Variegated dogwoods. *Proc. Plant Propagators' Soc.*, 12:249-253.
58. Curtis, W. J. 1963. "Discussion". *Proc. Plant Propagators' Soc.*, 13:151.
59. Davidson, J. R. 1962. Plum stocks for use with D'Agen prune. *Hort. Res. Rec.*, N.S.W. No. 3, 70-82. (H. A. 33-4511)
60. Davis, B. II 1962. The modified patch bud. *Proc. Plant Propagators' Soc.*, 12:136-139.
61. Davis, B. II 1964. Nursery propagation of carpathian walnuts. *Proc. Plant Propagators' Soc.*, 14:149-152.

62. De Freitas, A. G. V. and M. A. da S. Pato 1963. Dez anos de observacoes sobre as relacoes dos porta-enxertos com os grafos e as condicoes ecologicas da regio de Torres Vedras. (Ten years' observations on scion stock relationships and ecological conditions in the Torres Vedras region). *Vinea* *Vino* *Portug.*, Docum. Ser 1., 1(2) 1-13. (H. A. 34-4432)
63. de Grout, C. 1960. Successful winter grafting of juniper varieties on unrooted cuttings. *Proc. Plant Propagators' Soc.*, 10 124-125.
64. de Grout, C. 1968. Rootstock survey correspondence. (Sheridan Nurseries, Oakville, Ontario, Canada)
65. De Haas, P. G. 1962. *Malus baccata/prunifolia* clones in comparison with M. XI during the period of increasing yields at Sarstedt and at Klein-Altendorf. (German) *ErwObstb.*, 4:203-8. (H. A. 33-2272)
66. De Haas, P. G. and W. Hildebrandt 1967. Die Unterlagen and Baumformen des Kern-und Steinobstes, Verlag Eugen Ulmer, Stuttgart, pp.224.
67. de la Rocha, G. G. 1960. Ensayo del sovreinjerto en manzano. (An experiment on double workings of apple trees). *Inf. mens.*, La Molina, 34(398) 14-18. (H. A. 31-3869)
68. Douglas, D. L. 1967. Rootstock survey correspondence. (Hort. Exp. Station, Brooks, Alberta, Canada)
69. Edmunds, F. 1963. Commercial production of roses in Oregon. *Proc. Plant Propagators' Soc.*, 13 11-14.
70. Eremeeva, M. E. 1967. Serological reaction as an index of scion and rootstock compatibility in vine grafts. (Russian) *Sel'. hoz Biol.*, 2:45-50. (H. A. 37-6507)
71. Evans, G. E. 1967. Rootstock survey correspondence. (Montana State University, Bozeman, Montana, U.S.A.)
72. Eynard, I. and M. J. Bukovac 1962. Studies on graft affinity in vines with the aid of radioactive isotopes. (Italian) *Atti. Accad. ital. Vite*, 13.511-518. (H. A. 33-4760)
73. Falch, J. 1960. Vorlaufige Ergebnisse uber den Stand der Unterlagenforschung bei Marille und Pfirsich im Baumschulalter. (Preliminary results of rootstock research in apricot and peaches of nursery age). *Besseres Obst*, 5:145-6, 163. (H. A. 32-259)
74. Fenicchia, R. A. 1957. Unusual plants and their propagation. *Proc. Plant Propagators' Soc.*, 7.158-164.
75. Ferguson, A. B. 1967. Rootstock survey correspondence. (Linn County Nurseries, Center Point, Iowa, U.S.A.)
76. Ferguson, A. B. 1968. Bench grafting black walnuts. *Proc. International Plant Propagators' Soc.*, 17:270-271.
77. Fiedler, W. 1961. Untersuchungen uber das Wushsverhalten verschiedener Unterlagen-Edelsorten-Kombinationen der Aprikose in der Baumschule. (Studies on the growth relationships of different scion-stock combinations of apricots in the nursery). *Kuhn-Arch.*, 75. 191-260. (H. A. 32-2441)
78. Fiedler, W. 1962. Studies on the transpiration behavior between different apricot rootstocks and graft combinations. (German) *Arch. Gartenb.*, 10.119-63. (H. A. 33-332)
79. Flemer, W. III 1956. The propagation of *Sophora japonica* by budding. *Proc. Plant Propagators' Soc.*, 6 44-45.
80. Flemer, W. III 1962. The vegetative propagation of oaks. *Proc. Plant Propagators' Soc.*, 12:168-171,
81. Fletcher, W. E. 1964. Peach bud-graft union on *Prunus besseyi*. *Proc. Plant Propagators' Soc.*, 14.265-271.
82. Foster, L. J. 1963. The performance of clonal apple rootstocks in Nyasaland. *Rhod. J. agric. Res.*, 1:39-46. (H. A. 33-4491)

83. Frolich, E. F. 1967. Rootstock survey correspondence. (University of California, Los Angeles, California, U.S.A.)
84. Gajvoronskijaja, Z.M. 1962. Vegetative propagation of oriental persimmon in the Vahs Valley. (Russian) *Bull, glav. bot. Sada*, 45 101-4. (H. A. 35-1954)
85. Galloway, R. and others 1962. Le Grezot-1, portegrefe viticole digne d'interet. (Grezot-1, an interesting vine rootstock). *Agric. romande, Stats fed. Ess. agric.* 1 21-3, 27-9. (H. A. 32-6234)
86. Gardner, F. E. and G. E. Horanic 1962. A comparison evaluation of rootstocks for Valencia and Parson Brown oranges on Lakeland fine sand. *Proc. Fla. St. Hort. Soc.* 1961, 74 123-7. (H. A. 32-5453)
87. Garnsey, G. M. and J. W. Jones 1967. Mechanical transmission of exocortis virus with contaminated budding tools. *Plant Dis. Repr.*, 51 410-13.
88. Gasanov, Z. M. 1966. Budding the subtropical persimmon. (Russian) *Subtrop. Kul'tury*, No. 3, 106-12. (H. A. 38-4273)
89. Gavriseva, I. F. 1964. The dynamics of starch accumulation in the shoots and roots of apple trees in relations to winter-hardiness and graft compatibility under Transbaikal conditions. (Russian) *Agrobiologija*, 3.432-6. (H. A. 35-383)
90. Gera, M. 1965. Az alma telı kezbenoltasa. (Bench grafting of apples in winter). *Kiserl. Kozlem. Sect. C.*, 58C(2) 39-51. H. A. (37-2260)
91. Gilmer, R. N. and K. D. Brase 1961. The association of chlorotic leaf-spot virus of apple with decline of Spy 227 rootstocks. *Phytopathology*, 51 457-61.
92. Gliemeroth, K. 1962. A physiological method of determining the inter-relationship between rootstock and scion of grafted fruit trees. (German) *Tagungsber dtsch. Akad. LandwWiss, Berlin*, 35.29-34. (H. A. 33-2256)
93. Greenhalgh, W. J. 1961. Centenary of an outstanding plum rootstock. *Agric. Gaz. N.S.W.*, 72 526-31. (H. A. 32-2448)
94. Greenhalgh, W. J. 1963. A pear rootstock trial at Bathurst Experiment Farm. *Agric. Gaz. N.S.W.*, 74 350-3. (H. A. 34-332)
95. Greer, E. 1967. Rootstock survey correspondence. (Pomona, California, U.S.A.)
96. Griffin, R. D. 1967. Rootstock survey correspondence. (Ontario, California, U.S.A.)
97. Halward, R. 1962. Collection, storage and use of dormant scionwood. *Proc. Plant Propagators' Soc.*, 12 144-150.
98. Harmon, F. N. and J. H. Weinberger 1963. Bench grafting trials with Thompson Seedless grape on various rootstocks. *Proc. Amer. Soc. Hort. Sci.*, 83 379-83.
99. Harmon, F. N. and J. H. Weinberger 1967. Studies to improve bench grafting of vinefera grapes. *Proc. Amer. Soc. Hort. Sci.*, 90 149-52.
100. Hartmann, H. T. 1967. Rootstock survey correspondence. (University of California, Davis, California, U.S.A.)
101. Hasek, F. M. 1969. Some scion-stock interrelationships. *Proc. Plant Propagators' Soc.*, 18 (In press)
102. Hegedus, A. and I. Iso 1965. Az egrı borvidekre legalkalmasabb alanyfajtak. (The most suitable rootstock varieties for the wine-producing region of Eger). *Kiserl. Kozlem, Sect. C.*, 58C(3). 61-77. (H. A. 38-2837)
103. Herman, D. E. 1967. Rootstock survey correspondence (South Dakota University, Brookings, South Dakota, U.S.A.)

104. Herrero, J. and M. C. Tabuenca 1962. Incompatibilidad entre patron e injerto. VI. Observaciones en uniones de peral sobre membrillero. (Incompatibility between stock and scion VI. Observations on unions of pear and quince). An. Estac. exp. Aula Dei, 7 64-78. (H. A. 34-329)
105. Hess, C. Sr. 1953. Magnolia from grafts. Proc. Plant Propagators' Soc., 3.113-115.
106. Hess, C. W. M. Jr. 1958. Copper beech by grafting. Proc. Plant Propagators' Soc., 8 69-71.
107. Hess, C. W. M. Jr. 1960. Evergreen grafts under plastic. Proc. Plant Propagators' Soc., 10 87-88.
108. Hess, C. W. M. Jr. 1968. Rootstock survey correspondence. (Hess' Nurseries, Cedarville, New Jersey, U.S.A.)
109. Higdon, R. J. 1956. Graft-union disorders in certain blight-resistant pear roots and trunk stocks. Proc. Amer. Soc. Hort. Sci., 68 44-47.
110. Hilgeman, R. H., D. R. Rodney, J. A. Dunlop and T. A. Hales 1966. Rootstock evaluation for lemons on two soil types in Arizona. Proc. Amer. Soc. Hort. Sci., 88 280-290.
111. Hill, J. B. 1953. Juniper grafting - practical and technical aspects. Proc. Plant Propagators' Soc., 3.86-93.
112. Hill, J. B. 1967. Rootstock survey correspondence. (D. Hill Nursery Company, Dundee, Illinois, U.S.A.)
113. Holley, W. D. 1961. Understock for greenhouse roses. Colo. Flower Grs' Assoc. Bull. No. 141, pp. 1-3.
114. Holmes, K. D. 1957. Propagation of some of the stone fruits. Proc. Plant Propagators' Soc., 7.164-167.
115. Hoogendorn, C. 1952. The grafting of *Viburnum*. Proc. Plant Propagators' Soc., 2 32-3.
116. Humphrey, B. and P. Drummer 1968. Stock/scion relationships. Proc. Plant Propagators' Soc., 17.389-392.
117. Hutchinson, A. and W. H. Upshall 1961. Four intermediate stocks for dwarf pear. Bienn. Rep't Hort. Exp. Stat., Vineland for 1959-60, 25-32.
118. Hutchinson, A. and W. H. Upshall 1964. Short-term trials of root and body stocks for dwarfing cherry. Ann. Rep't Ont. Hort. Exp. Stat. Prod. Lab. 1963, 8-16.
119. Iwasaki, R. and others 1961. Double working of Satsuma orange. II. Effects of interstock on tree growth, fruit quality and yield. (Japanese) J. Jap. Soc. Hort. Sci., 30 63-72. (H. A. 32-1673)
120. Jakovleo, P. K. 1961. Population by grafting of *Populus bolleana*. (Russian) Bjull. glav. bot. Sada No. 43, pp. 87. (H. A. 34-7213)
121. Johannson, E. and H. Sahlstrom 1961. Sortforsok Med apple i Norrland Och Varmland. (Apple variety trials in Norrland and Varmland). Sver. pomol. Foren. Arsskr. 1960, 61 115-31. (H.A. 31-3841)
122. Jonceva, M. 1967. Nursery studies on some seedling rootstocks for the Kjustendel Blue plum. (Bulgarian) Grad lozar. Nauka, 4(3).15-29. (H. A. 37-6246)
123. Karnatz, H. 1962. Weitere Erfahrungen mit der Apfelunterlage A2. (Further experience with the apple rootstock A2). Mitt. ObstVersuchsanst., Jork., 17.154-9. (H. A. 32-6036)
124. Katzfuss, M. and G. Meier 1960. Erfahrungen mit der Pflaumenunterlage Klon 103 als Unterlage fur den Pfirsich. (Experiments made with the plum rootstock clone 103 as a rootstock for peach). Dtsch. Gartenb., 7:124-5. (H. A. 31-250)
125. Kern, C. 1956. The use of grafts to obtain own-rooted lilacs. Proc. Plant Propagators' Soc., 6:88-94.

126. Kester, K. E. 1961. Inheritance of bud failure in almonds. Proc. Amer. Soc. Hort. Sci., 77:278-285.
127. Kester, D. E. and C. J. Hansen 1966. Rootstock potentialities of F₁ hybrids between peach (*Prunus persica* F.) and almond (*Prunus amygdalus* Batsch). Proc. Amer. Soc. Hort. Sci., 89:100-109.
128. Kester, D. E., C. J. Hansen and C. Panetos 1965. Effect of scion and interstock variety on incompatibility of almond on Marianna 2624 rootstock. Proc. Amer. Soc. Hort. Sci., 86:169-177.
129. Kirkpatrick, J. D., W. P. Bitters and F. J. Foot 1962. Incompatibility of Price and Cook Nucellar Eureka lemon trees on No. 1452 citromelo rootstock. Plant Dis. Repr., 46:267-8.
130. Kirkpatrick, J. D., W. P. Bitters and L. G. Weathers 1962. Lemon bud union disorder a serious threat. California Citrower, 47 199-205. (H. A. 32-7223)
131. Kirschner, H. C. 1967. Rootstock survey correspondence. (University of Minnesota, St. Paul, Minnesota, U.S.A.)
132. Komarova, E. F. 1964. Graft affinity in grape vines. (Russian) Vinodelie i Vinogradarstvo, 24(8):26-8. (H. A. 35-3011)
133. Koreseva, R. N. 1963. Anatomical analysis of the union of grafts of sweet cherry on certain species of stone fruits. (Russian) Bot. Zurnal, 48 806-22. (H. A. 34-2215)
134. Korovin, V. A. 1961. Rootstock-scion incompatibility in apple. (Russian) Sadovodstvo, 1:23-5. (H. A. 31-5813)
135. Korovin, V. A. 1961. Loss of fruit hardness in apple trees in which the scion and rootstocks are incompatible. (Russian) Fiziol, Rast., 8:476-81. (H. A. 32-247)
136. Korovin, V. A. 1964. It is necessary to improve the selection of Klajka. (Russian) Sadovodstvo, 1:16-17. (H. A. 34-4182)
137. Lakshmann, V. 1958. Anatomy of stionic incompatibility. A review. South Indian Hort., 6 8-16. (H. A. 31-219)
138. Leach, D. G. 1960. Outside green grafting of rhododendrons under polyethethylene. Proc. Plant Propagators' Soc., 10 90-92.
139. Leiser, A. T. and R. W. Harris 1967. Pruning the Bradford pear. Amer. Nurseryman, 126(11) 9, 65-7.
140. Leiss, J. 1965. Question Box Discussion. Proc. Plant Propagators' Soc., 15:215.
141. Leiss, J. 1966. Trials with three *Juniperus* understock. Proc. Plant Propagators' Soc., 16 215-217.
142. Leiss, J. 1968. Grafting outdoor, deciduous and broadleaf. Proc. Propagators' Soc., 17:303-305.
143. Le Roux, M. S. 1962. Which rootstock for Waltham Cross grapes? Fmg. S. Africa, 38(5).21-2. (H. A. 33-572)
144. Leroy, Y. 1959. Le rosier haute tige en Algerie. (Standard roses in Algeria). Rev. hort. Alger., 63(10/12).22-25. (H. A. 31-1165)
145. Liacu, A. 1960. Contributi la studiul partaltoiler caisului. (A contribution to the study of apricot rootstocks). Lucr. sti. Insti. agron. Iasi, 321-6. (H. A. 32-4289)
146. Liacu, A. and F. Rosu 1961. Contribution to the study of pear rootstocks. (Romanian) Lucr. sti. Inst. agron. Iasi., 257-262. (H. A. 33-6714)
147. Liacu, A., M. Mitu and R. Florica 1962. Contributions to the study of plum rootstocks. (Romanian) Lucr. sti. Inst. agron. Iasi., 159-164. (H. A. 33-4512)

148. Liacu, A. 1964. Contribuții la studiul porumbarului ca portaltor pentru prun. (Contributions to the study of sloe as a plum rootstock.) *Lucr. sti. Inst. agron. Iasi.*, 273-242. (H. A. 35-7127)
149. Longley, R. P. 1960. The variability of trunk cross-sections and yields of Fameuse and McIntosh apple trees grown on three clonal and two seedling rootstocks. *Proc. Amer. Soc. Hort. Sci.*, 76 11-15.
150. Longley, R. P. 1963. Growth and yield of trees during the first five years of three varieties of apples on Malling-Merton rootstocks 104, 106, 109, and 111. *Proc. Amer. Soc. Hort. Sci.*, 83.74-76.
151. Luckwell, L. C. 1962. New developments in the studies of graft incompatibilities in fruit trees. *Proc. XV Int. Hort. Congr., Nice, 1958*, 2:23-27.
152. McDaniels, J. C. 1967. Rootstock survey correspondence. (University of Illinois, Urbana, Illinois, U.S.A.)
153. McElroy, G. H. 1967. Apple rootstock developments. *Agric. N. Ireland*, 42.24-71. (H. A. 37-6238)
154. McFadden, S. E. Jr. 1960. Production of tree roses on *Rosa fortuneana* stock. *Proc. Fla. St. Hort. Soc. for 1959*, 72:413-17. (H. A. 31-1166)
155. McGill, W. 1952. The selection of maple understock, budwood and the timing and placement of buds. *Proc. Plant Propagators' Soc.*, 2 64-70.
156. McGuire, J. J. 1967. Rootstock survey correspondence. (University of Rhode Island, Kingston, Rhode Island, U.S.A.)
157. McNeill, D. R. 1967. Rootstock survey correspondence. (Skinner's Nursery Ltd., Roblin, Manitoba, Canada)
158. Mahlstedt, C. 1962. A new technique in grafting Blue spruce. *Proc. Plant Propagators' Soc.*, 12 125-126.
159. Mahmet, B. M. A new rootstock for pears. (Russian) *Sadovodostvo*, No. 1, pp. 21. (H. A. 34-4187)
160. Malan, A. H. 1960. Alphonse Lavalley vines on Jacques rootstocks give good results. *Fmg. S. Afr.*, 36(7).39-40. (H. A. 31-2130)
161. Marloth, R. H. and W. J. Basson 1960. Empress Mandarin as a rootstock for citrus. *J. Hort. Sci.*, 35 282-292.
162. Matton, H. G. 1952. Vegetative propagation of holly by grafting. *Proc. Plant Propagators' Soc.*, 2:91-93.
163. Mazanasvili, G. K. 1960. Establishing the resistance to chlorosis of vine rootstock varieties. (Russian) *Vinodelie i Vinogradarstvo*, 20(3) 43-44. (H. A. 31-422)
164. Mellado, L. and others 1966. Estudios sobre relaciones injerto-patron en vides utilizando P-32 como trazador. (Studies on scion-rootstock relationships in vines, using P32 as a tracer). *Publ. Inst. nac. Invest. agron. Madrid, 1966*, pp. 76. (H. A. 38-2839)
165. Mendel, K. and A. Cohen 1967. Starch level in the trunk as a measure of compatibility between stock and scion in *Citrus*. *J. Hort. Sci.*, 42:231-41.
166. Meurman, O. 1967. Ett markligt fall av oforenlighten hos apple. (A remarkable case of incompatibility in apples). *Fruktodlaren*, 38(4). 4-5. (H. A. 38-2587)
167. Milosavljevic, M. 1959. The effect of the duration of stratification on the union and quality of vine grafts. (Yugoslav) *Z'born. Rad. poljopriv. Fak. Beograd.*, 7(274):1-5. (H. A. 31-4116)
168. Mitu, M. 1961. Contribution to the study of the growth and performance in a nursery of some native varieties of plum. (Romanian) *Lucr. sti. Inst. agron. Iasi.*, 271-278. (H. A. 33-6724)
169. Moore, P. W. 1961. Current methods in the selection and production of citrus nursery stock. *Proc. Plant Propagators' Soc.*, 11.240-247.

170. Moore, P. W. 1966. Propagation and growing citrus nursery trees in containers. Proc. Plant Propagators' Soc., 16 54-62.
171. Moore, R. S. 1967. Rootstock survey correspondence. (Visalia, California, U.S.A.)
172. Moreira, S., V. G. Oliveira and D. Abaramides 1960. Experimentos de cavalos para citros III. (Experiments with citrus rootstocks, III). *Bragantia*, 19.961-95. (H. A. 32-3666)
173. Mosse, B. 1962. Graft incompatibility in fruit trees. Commonwealth Bureau of Hort. and Plantation Crops, Tech. Comm., 28, pp. 36.
174. Nelson, S. H. 1968. Rootstock survey. (Formerly Central Experimental Farm, Ottawa, Ontario, Canada)
175. Nestirov, J. S. 1962. Biological compatibility of the rootstock and scions in apple. (Russian) *Vestn. sel'sk Nauki*, 7(1) 125-9. (H. A. 32-6030)
176. Nienstaedt, H. 1958. Fall grafting of spruce and on conifers. Proc. Plant Propagators' Soc., 8.98-104.
177. Nordine, R. M. 1952. "Discussion". Proc. Plant Propagators' Soc., 2.87.
178. Nordine, R. M. 1959. Budding hawthornes. Proc. Plant Propagators' Soc., 9.201-202.
179. Nordine, R. M. 1968. Rootstock survey correspondence. (Morton Arboretum, Lisle, Illinois, U.S.A.)
180. Olden, E. J. 1961. Orienterands plantskole-och grundstamforsok med magra dvargunderlag for paron. (Preliminary nursery and rootstock studies with some dwarfing pear stocks.) *Sver. pomol. Foren. Arsskr.*, 1960, 61 103-14. (H. A. 31-3877)
181. Olden, E. J. 1961. Vaxtforadlingsarbeten och forokningsforosk med plommongrundstammar. (Breeding work and propagation studies with plum rootstocks). *Sver. pomol. Foren. Arsskr.*, 62.27-39. (H. A. 32-2447)
182. Orlov, M. I. 1960. The culture of *Clematis jackmanii*. (Russian) *Bjull. glav. bot. Sada*, No. 38, 33-7. (H. A. 34-5236)
183. O'Rourke, F. L. S. 1961. The propagation of pines. Proc. Plant Propagators' Soc., 11 16-22.
184. Orum, Peter 1967. Rootstock survey correspondence. (D. Hill Nursery Co., Dundee, Illinois, U. S. A.)
185. Pellett, H. 1967. Rootstock survey correspondence. (University of Minnesota, St. Paul, Minnesota, U.S.A.)
186. Petty, J. L. 1963. *Rosa canina*. Proc. Plant Propagators' Soc., 13. 202-204.
187. Posnette, A. F. and R. Copley 1962. Further studies on the selection of William Bon Chretien pear compatible with Quince A rootstocks. *J. Hort. Sci.*, 37.291-4.
188. Posnette, A. F. 1963. Virus diseases of apples and pears. Tech. Comm. Bur. Hort. and Plantation Crops No. 30, pp. 141, 218 references.
189. Potter, J. M. S. and H. F. Ermen 1962. Variability in growth between single and double worked pear trees. *Exp. Hort.* No. 6, pp. 45-7. (H. A. 33-331)
190. Prica D. and S. Catavela 1965. Folosirea prunilor locale ca intermediari pentru cais. (The use of native plum varieties as intermediate stocks for apricots). *Grad. Via Liv.*, 14(3):43-6. (H. A. 35-7122)
191. Putov, V. S. 1967. The use of polymer films in the fruit nursery. (Russian) *Himiya sel' Hoz.*, 5(3).65-6. (H. A. 38-2575)

192. Randhawa, S. S., B. S. Bajwa and J. C. Bakshi 1961. Studies on the behaviour of seedlings of some common citrus rootstocks in the nursery. *Indian J. Hort.*, 18:71-80. (H. A. 32-5451)
193. Reisch, K. 1967. Rootstock survey correspondence. (The University of Ohio, Columbus, Ohio, U.S.A.)
194. Remy, P. 1967. Rootstock survey correspondence. (Pepinieres Moreau Villefranche-sur-saone, France.)
195. Rios-Castano, D. 1964. Revision de las investigaciones sobre patrones para citricos conducidas en Columbia. (A review of research of citrus rootstocks carried out in Columbia). *Agric. trop. Bogota*, 20:571-79. (H. A. 35-4347)
196. Roberts, A. N. 1963. Propagation of cherry rootstocks. *Proc. Plant Propagators' Soc.*, 13:269-273.
197. Rodriguez, D. S. 1967. Declinacion de la plantaciones de naranjos con portainjerto de lima dulce en Bella Vista (Corrientes). (The deterioration of orange orchards on sweet lime rootstocks in Bella Vista, Corrientes Province). *Idia*, No. 237, 33-6. (H. A. 38-4154)
198. Rosu, F. 1964. Contributii la studiul portaltoilor gutuiului. (Contributions to the study of rootstock for quinces). *Lucr. sti. Inst. agron. Iasi*, pp. 243-5. (H. A. 35-7119)
199. Rosu, F. 1966. Contributii la studiul portaltoilor generativi ai parului in pepiniera. (A contribution to studies of seedling rootstocks for pears in the nursery). *Lucr. sti Inst. agron. Iasi*, 307-11. (H. A. 38-257)
200. Roubals, D. and R. Pistre 1963. Resultats obetnus dans un champ d'essai di cepages et de porte-greffes du Midi de la France. (Results obtained in a field trial of vine varieties and rootstocks in the south of France). *Progr. agric. vitic.*, 160:49-60. (H. A. 34-4433)
201. Row, R. N. 1960. The search for "wet-resistant" peach rootstocks. *J. Agric. Vict.*, 58:292-3. (H. A. 31-1933)
202. Roy, P. O. 1960. Le porte-greffe en pomiculture influence sur le rendement de la variete McIntosh. *Agriculture, Quebec*, 17:40-42.
203. Russo, F. 1959. Ulteriore contributo di esperienze sul comportamento *Citrus volkameriana* Pasq. quale portinnesto de limone. (A further contribution to experience of the performance of *Citrus volkameriana* as a rootstock for lemon). *Tech agric.*, 11:423-7. (H. A. 31-1244)
204. Sadamori, S. and others 1963. A study of a disorder of top-worked apple trees. (Japanese) *Bull. Hort. Res. Sta. Morioka, Ser. C*, 1:7-24. (H. A. 34-4497)
205. Sadikia, B. N., D. E. Kester and M. V. Bradley 1966. Dormant vegetative buds in normal and bud-failure forms of almond (*Prunus amygdalus* Batsch). *Proc. Amer. Soc. Hort. Sci.*, 89:150-156.
206. Safran, H. and A. Bental 1968. Effects of sour orange, rough lemon and sweet lime interstock-rootstock combinations on the performance of Shamouti (*C. sinensis*) trees. *The Israel J. Agr. Res.*, 18(4). (in press).
207. Sako, J. and O. Meurman 1960. Kestavien valirunkojen merkijyksesta omenapuulle. (The significance of hardy framebuilders for apple trees). *Maatalous ja Koetoin*, 14:171-81. (H. A. 31-1923)
208. Salibe, A. A. and V. Rossetti 1960. Variedades citricas e saus portanxertos nos laranjais paulistas. (Citrus varieties and their rootstocks in S. Paulo orange orchards) *Arg. Inst. biol.*, S. Paulo, 27:161-8. (H. A. 32-5443)
209. Samish, R. M. 1962. Physiological approaches to rootstock selection. *Proc. XV Int. Hort. Congr.*, Nice, 1958, 2:12-17.
210. Samish, R. M. and A. Gur 1962. Experiments with budding avacados. *Proc. Amer. Soc. Hort. Sci.*, 81:194-201.

211. Sax, K. 1957. Dwarf ornamentals and fruit trees. Proc. Plant Propagators' Soc., 7:146-153.
212. Schenk, W. 1962. Der heutige Stand der Affinitätsforschung in der Rebenveredlung. Weinberg u. Keller, 9 391-402.
213. Schmadlak, J. and H. Volkel 1964. Verhalten von Pfirsichsorten auf Unterlagen *Prunus* Schwamborn 103 and *Prunus* Brunker in der Baumschule. (The performance of peach varieties on the rootstocks *Prunus* Schwamborn 103 and *Prunus* Brunker in a nursery). Obstbau, Berlin, 1964, 4 84-6. (H. A. 35-372)
214. Schoeneweiss, D. 1963. Grafting to overcome chlorosis in pin oak. Proc. Plant Propagators' Soc., 13 138-140.
215. Sexton, D. 1965. Grafting of selected ornamentals. Proc. Plant Propagators' Soc., 15 278-280.
216. Sievers, E. 1967. Methode und Ergebnisse einer Prüfung von Veredlungswachsen und Paraffinen auf einen Pflanzenwirksamen Gehalt an wachslumshemmenden Stoffen. (Methods and results of a test concerning a plant-active content of growth-retarding substances in grafting waxes and parafins). Weinberg u Keller, 14 549-55. (H. A. 38-2834)
217. Shadow, H. A. 1959. The budding of dogwood in the field. Proc. Plant Propagators' Soc., 9 54-56.
218. Sharama, M. D. 1962. Graft your hibiscus for vigour and quality of bloom. Indian Hort., 6(3).18-19. (H. A. 33-1307)
219. Sharpe, R. H. 1967. Persimmon variety and rootstock observations. Proc. Fla. Sta. Hort. Soc., 1966, 79:374-9. (H. A. 37-7789)
220. Shiozaki, B. 1967. Rootstock survey correspondence. (The White Flower Nursery Co. Inc., Los Angeles, California, U.S.A.)
221. Siebenthaler, J. 1952. "Discussion" Proc. Plant Propagators' Soc., 2 75.
- ✓ 222. Simmons, R. 1966. Abnormal phloem development and sieve-tube necrosis associated with Golden Delicious on EM VII rootstock. Proc. Amer. Soc. Hort. Sci., 89:14-22.
223. Simpson, R. C. 1965. Crabapple propagation by cuttings, grafting, and budding. Proc. Plant Propagators' Soc., 15:173-176.
224. Simpson, R. C. 1968. Rootstock survey correspondence. (Simpson Orchard Co., Vincennes, Indiana, U.S.A.)
225. Singh, L. B. 1961. Studies on the rootstocks for sweet orange in the wet-tropics. 1. Variety Mosambi (non-blood group). Hort. Advance, 5 156-70. (H. A. 33-1576)
226. Singh, L. B. 1961. Studies on the rootstock for mandarins in the wet sub-tropics II. Variety Sringar. Trop. Agriculturist, 117 181-92. (H. A. 33-5937)
227. Singh, L. B. 1962. Studies on the rootstock for mandarins in the wet sub-tropics I. Variety Hill. Indian J. Hort., 19:1-9. (H. A. 33-5937)
228. Singh, L. B. 1963. Preliminary studies on the comparative performance of Karna Khatta and trifoliolate orange rootstocks for sweet orange variety Vanille. Indian J. Hort. 20 88-92. (H. A. 34-3574)
229. Singh, S. 1960. Nasnaran is a rootstock for citrus. Indian Hort. (42). 21,32. (H. A. 31-1243)
230. Singh, S. N. 1962. Studies in the stock-scion incompatibilities in citrus. Ann. Rep't hort. Res. Inst. Saharanpur, 1961, pp. 88-97. (H. A. 33-1575)
231. Skinner, H. T. 1952. Vegetative propagation of oaks and suggested research techniques. Proc. Plant Propagators' Soc., 2.81-85.
232. Skinner, H. T. 1954. Fundamentals of azalea propagation. Proc. Plant Propagators' Soc., 4:129-136.

233. Somorowski, K. 1964. Nowe typy pigwy podkladkowej. (New clones of quince rootstocks). Prace Inst. Sadown w. Skierniewicach, 8 21-29. (H. A. 35-2702)
234. Sorgel, P. 1963. The testing of pear varieties for their suitability as stem builders in the nursery. (German) ErwObstb., 5:33-34. (H. A. 33-4502)
235. Soucek, J. and J. Burget 1960. Vysledky dalsich pokusu s podnozemi pro slivone. (Results of further trials with plum rootstocks). Ved Prace ovocn. CSAZV. v. Holovousich, 1:243-60. (H. A. 31-3890)
236. Spangelo, L. P. S. 1967. Rootstock survey correspondence. (Central Experimental Farm, Ottawa, Ontario, Canada.)
237. Speroni, H. A. and others. Novenas jornadas citricolas argentinas. (The ninth Argentinian citrus conference). Idia, Suppl. 6, pp. 195. (H. A. 32-3652)
238. Spicer, C. R. 1967. Rootstock survey correspondence. (Palmerston North, New Zealand).
239. Spiegel-Roy, P. 1967. Rootstock survey correspondence. (The Volcani Institute of Agricultural Research, Rehovot, Israel).
240. Srivastava, R. P. and L. Singh 1966. Wild pear as a rootstock for apples. Punjab hort. J., 6:177-81 (H. A. 38-252)
241. Stan, P. 1960. Productia principalelor soiuri de portaitoi in cultura pe deal, la Valea Calugareasca. (The productivity of the principal rootstock varieties on slopes in the Valea Calugareasca vineyard). Lucr. sti. Inst. Cerc. horti-vitic., 1958-59, pp. 137-45. (H. A. 32-4512)
242. Stefanov, N. 1964. Determining the most suitable rootstock for apricots and the most suitable height of stem. (Bulgarian) Grad. lozar. Nauka, 1(6) 3-12. (H. A. 35-5053)
243. Sullivan, D. T. 1967. Rootstock survey correspondence. (New Mexico State University, Las Cruces, New Mexico, U. S. A.)
244. Tabuenca, M. C. 1960. Incompatibilidad entre patron e injerto IV. Comportamiento del melocotonero con distintos patrones clonales del genero *Prunus*. (Scion-stock incompatibility IV. The reaction of peaches to different clonal rootstocks of the genus *Prunus*). An. Estac. exp. Aula Dei, 6 173-80. (H. A. 31-5821)
245. Tabuenca, M. C. 1962. Relaciones entre la composicion quimica y el grado de compatibilidad en combinaciones de melocotonero y ciruelo. (Relationships between chemical composition and degree of compatibility in peach-plum combinations). An Estac. exp. Aula Dei, 7:1-34. (H. A. 34-333)
246. Tarasenko, M. P. 1960. Apricot - a plum rootstock in the Ukrainian S.S.R. (Russian) Sadovodstvo, 7:23-5. (H. A. 31-3892)
247. Teaque, C. P. 1966. Avacado tip-grafting. Proc. Plant Propagators' Soc., 16 50-51.
248. Teaque, C. P. 1966. "Discussion". Proc. Plant Propagators' Soc., 16 61.
249. Thorsrud, J. 1966. Grunnstanmeforsk med eplesortene Gravenstein, Akerø og James Grieve (Rootstock trials with the apple varieties Gravenstein, Akerø and James Grieve). Forskn. Fors. Landbr., 17 297-308. (H. A. 37-2265)
250. Tichnor, R. L. and A. N. Roberts 1963. Nursery performance of selected garden rose rootstocks. Proc. Plant Propagators' Soc., 13:205-207.
251. Tkacenko, G. 1965. Intermediate stocks to replace Paradise. (Russian) Sadovodstvo, 1:21. (H. A. 35-5048)
252. Toenjes, W. and R. F. Carlson 1963. Ten-year performance of four apple varieties on six East Malling rootstocks. Quart. Bull. Mich. Agr. Exp. Stat., 45:450-54.

253. Torikata, H. and H. Higuchi 1962. Studies on the graft congeniality in chestnut trees. 1. Influence of rootstocks on the growth and mineral composition. (Japanese) J. Jap. Soc. Hort. Sci., 31 115-22. (H. A. 33-2631)
254. Traas, J. 1967. Rootstock survey correspondence. (Traas Nursery Inc., Langley, British Columbia, Canada)
255. Tukey, H. B. 1963. The historical background, the development, and the propagation of clonal apple rootstocks in America. Proc. Plant Propagators' Soc., 13 244-259.
256. Turner, F. 1967. Rootstock survey correspondence. (Springfield, Ohio, U.S.A.)
257. Umhaurer, M. 1962. First results with a peach rootstock trial. (German) Intensivobstb., 2 6-8. (H. A. 33-338)
258. Unthank, J. E. 1962. Rootstock. sweet orange recommended in virgin soils Emperor, trifoliata, citrange for replants. Citrus News, 38. 130. (H. A. 33-5936)
259. Upshall, W. H. 1962. Fruit tree rootstock investigations at Vineland, Canada. Proc. XV Int. Hort. Congr. Nice, 1958, 2 18-22.
260. VanDerHarst, J. and L. D. Sparnaay 1966. Rose rootstock experiments and breeding. Proc. 17th Int. Hort. Cong. Md., 1, Abstr. 359.
261. Vasey, W. E. 1967. Rootstock survey correspondence. (Washington State University, Puyallup, Washington, U.S.A.)
262. Veca, A. Jr. 1967. Rootstock survey correspondence. (Santa Barbara, California, U.S.A.)
263. Vermeulen, J. and P. Vermeulen 1967. Rootstock survey correspondence. (Vermeulen and Sons, Neshanic Station, New Jersey, U.S.A.)
264. Volkel, H. and J. Schamadlak 1964. Verhalten von Aprikosorten auf den Unterlagen *Prunus* Schwamborn 103 und *Prunus* Brunker in der Baumschule. (The performance of apricot varieties on the rootstock *Prunus* Schwamborn 103 and *Prunus* Brunker in a nursery). Obstbau, Berlin 4 103-4. (H. A. 35-369)
265. Wadley, B. N. 1961. Control western X-disease in sweet cherries by top-working on Mahaleb rootstocks. Fm. Home Sci., Utah, 22(1) 10-11, 22-23. (H. A. 32-2716)
266. Wallace, J. A. 1967. Miscellaneous correspondence. (The Beaverlodge Nursery, Alberta, Canada)
267. Walter, H. 1967. Rootstock survey correspondence. (City of Oklahoma City, Oklahoma, U.S.A.)
268. Warriner, W. 1967. Rootstock survey correspondence. (Jackson and Perkins, Newark, New York, U.S.A.)
269. Waxman, S. 1960. Propagation of *Sciadopitys verticillata*. Proc. Plant Propagators' Soc., 10 178-181.
270. Wedge, D. 1956. How we propagate French lilacs at the Wedge Nursery. Proc. Plant Propagators' Soc., 6 75-78.
271. Wedge, D. 1964. Lilac production at Wedge Nursery. Proc. Plant Propagators' Soc., 14 166-168.
272. Weinberger, J. 1961. Nematode-resistant rootstock named. West. Fruit Gr., 15(8) 28. (H. A. 32-260)
273. Wells, J. S. 1955. Grafting pine and spruce. Amer. Nurseryman, 101 (1) 15, 16, 54-59.
274. Wells, J. S. 1958. Plant propagation practices. MacMillan Co., New York, pp. 344.
275. Welsh, M. 1967. Rootstock survey correspondence. (Research Station Summerland, British Columbia, Canada)
276. Welsh, M. 1968. Virus-free rootstocks. Proc. Plant Propagators' Soc., 17 56-61.

277. White, D. B. and J. P. Mahlstedt 1960. Compatibility in grafting and budding fruit and ornamental plants for adaptation and dwarfing purposes. *Proc. Plant Propagators' Soc.*, 10 50-56.
278. White, D. B. 1963. Effects of stock-scion combinations on the performance of apples. *Proc. Plant Propagators' Soc.*, 13 182-190.
279. Widmoyer, F. B. and D. T. Sullivan 1968. Morphology of Arizona cypress on Hetz juniper. *Proc. Plant Propagators' Soc.*, 17 403-405.
280. Wirth, A., W. Bryner, and T. Meli 1967. Bericht über einen 7-jährigen Unterlagenversuch. (Report on a 7-year rootstock experiment). *Schweiz. Z. Obst - u. Weinb.*, 103 697-704, 733-8. (H. A. 38-2579)
281. Wong, J. L. 1966. A study of citrus grafting techniques in Taiwan. (Chinese) *Taiwan Agric. Quart.*, 2(2).33-7. (H. A. 37-3665)
282. Yoshimura, F. and others 1960. Studies in citrus rootstocks III. Growth response of seedlings of some citrus varieties to soil temperature in summer and winter. (Japanese) *J. Hort. Ass. Japan*, 29 107-13. (H. A. 31-3103)
283. Zawadzka, B. and D. F. Milliken 1962. Changes in the D.N.A. content of leaves collected from healthy and virus infected cherry. *Phytopath.*, 52 758.
284. Zilina, E. M. 1962. Rootstocks for pome fruit. (Russian) *Sadovodsvo*, 12 19-20. (H. A. 33-4495)
285. Zimmerman, R. H. 1967. Rootstock survey correspondence. (U.S.D.A., Beltsville, Maryland, U.S.A.)
286. Zorg, P. 1956. "Discussion". *Proc. Plant Propagators' Soc.*, 6 91.