# Scionwood of Pear Cultivars and Species Available from the U.S. Plant Introduction Station

H. E. WATERWORTH[1]

The U.S. Department of Agriculture maintains a large collection of pear germplasm at its Plant Introduction Station, Glenn Dale, Maryland. The items are clonal introductions assembled from foreign countries during the past 50 years. Nearly all are included and partially described in "Fruit and Tree Nut Germplasm Resources Inventory" by Fogle and Winters (1). Their origin and the purpose for bringing them into the USA, along with some of their unusual virtues, are given in the published inventory series, which is available in most state college of agriculture libraries (3). The introductions are a diverse collection of exotic varieties, breeding lines, wild types, and species. Some of the older introductions have endured prolonged adverse environmental conditions and exposure to several diseases. Fireblight, scab, and leaf-spot (caused by *Fabraea maculata*) are among the diseases seen in our orchards.

In 1970 Ritter (2) listed by name about 780 pear varieties and species. He also gave the addresses of the source of the scionwood. The pear collection at this Station was not included in that report.

Below are listed about 190 pear varieties and lines that were not included in Ritter's report. A limited amount of scionwood of these is available to fruit breeders. All have passed through quarantine. Those with P.I. numbers of 300000 or higher have been indexed for virus and mycoplasma infections by described procedures (4). This latter group is free of disease agents that are not known to occur in the USA. About 20% of the items contain one or more latent viruses (*) that are widespread in the USA and Canada. For release of these items, we require a statement from the state quarantine officer that it is permissible to ship virus-infected scionwood into the state in question. The name and address of this officer will be provided as necessary upon receipt of request for scionwood.

Many of the varieties were received with only foreign-language names, some of which may be near synonyms to U.S. or other better known names. Since none has been tested for trueness-to-type, the Government assumes no liability regarding any misidentity.

Requests for scionwood of these pears or apple varieties (5) should be mailed to the U.S. Plant Introduction Station, USDA, SEA, AR, Glenn Dale, Maryland 20769.

**Pear Introductions on Inventory at the Plant Introduction Station Glenn Dale, Maryland — July 1980**

| Variety | Number | Variety | Number |
|---|---|---|---|
| Aarer Pfundbirne | 282966 | Beurre Dubisson | 255607 |
| *Akce | 324124 | Beure Inflancka | 307539 |
| Alliance Franco | 260150 | Beurre Jean van Geert | 280030 |
| Amiral Gervais | 255605 | Beurre Perrault P.138 | 279330 |
| Arabitka | 449285 | Beurre Slucka | 307540 |
| *Bella Di Diugno | 324125 | BP-1 (Bien Donne 1) | 436538 |

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## Pear Introductions (Cont.)

| Variety | Number |
|---|---|
| BP-2 (Bien Donne 2) | 420810 |
| Butirra Di Roma | 324126 |
| Butirra Roma Pirovano P.1274 | 279332 |
| Buzas Korte | 449286 |
| Catillac | 307507 |
| Cebulka | 312495 |
| Cherry Pear | 260200 |
| Comice (spur type) | 352632 |
| Comice B363 | 271658 |
| Coscia S.269 | 260155 |
| Count A. W. Moltke (triploid) | 295087 |
| Cure | 449288 |
| Czui-czi-li | 289522 |
| Des Urbanistes P.716 | 279333 |
| Double Philip | 295088 |
| Doyenne d'Alencon | 295089 |
| Doyonne Flor Aine | 255610 |
| *Eccianka | 392319 |
| Eletta Morettini | 311714 |
| Epargne P.209 | 279334 |
| Epine de Mai P.24 | 290783 |
| Er-shi-shinge | 312496 |
| Favorite Morel | 255611 |
| Forostovsky | 143977 |
| *Fragrante | 324127 |
| Gansel's Bergamot | 280033 |
| Geva 505/3/A | 449289 |
| Gieser Wildeman 105.130 | 264194 |
| *Gliva Ukrainskaya | 318837 |
| Gliva Ukrainskaya/Wilenska Plenna/ | 312497 |
| *Grata | 324128 |
| Guenette | 277525 |
| Helmershus Roda (Red fruit) | 295090 |
| Herrenbirne (Esperen) | 295091 |
| HN No. 36 | 358953 |
| HN No. 39 | 358954 |
| Huyshe's Victoria | 280034 |
| Itala | 324131 |
| Iubileinaia (Jubilee) | 292376 |
| Jakubka Ceska | 282971 |
| Jalovcovka | 307541 |
| Johantorp | 285530 |
| Jules d'Airolles | 386006 |
| Kair Aarmund | 282972 |
| King Sobieski | 312501 |
| Kiparyjska | 307542 |
| Klementin KA | 392320 |
| *Krolewna | 312502 |
| Kruidernier | 295680 |
| LA 62 | 386007 |
| Lajre | 295092 |
| La Providence Tree 1 | 278727 |
| Le Brun | 263682 |
| Le Lectier 184 | 260158 |
| Leopardo Morettini | 318867 |
| Lesnaia Krasavitza (Forest Beauty) | 292375 |
| Lezinova | 282973 |
| Louis Pasteur P.459 | 260159 |
| Lukavanski | 282974 |
| Madame Boutant | 255614 |
| Madame Soulanges | 123968 |
| Manchurian | 143978 |
| Me Ballett Du | 231810 |
| *Mellina | 324132 |
| Michurin's Winter Beurre | 312503 |
| Mora 112 | 241972 |
| Morettini 113 | 318869 |
| Muskatelka Prava | 282975 |
| Musta Bey | 324134 |
| Nagy Szegfukorte | 449287 |
| Niitaka | 392317 |
| Nijusseki | 224196 |
| *Novogodnaia | 292372 |
| Okusankichi | 392318 |
| Onward | 437060 |
| Parrot | 280035 |
| Pautalia | 392321 |
| Petit Muscat | 277526 |
| President Hardy | 137078-C |
| *President Heron | 322036 |
| *President Osmonville 40 | 264197 |
| *Progress | 392322 |
| X Pyronia veitchii | 354102 |
| Ranniaia Mleevskaia | 292377 |
| Red Bartlett | 258948 |
| Rosu Tamiios de Bristrita | 352658 |
| Rotkottig frau Ostergotland | 295094 |
| Rousselet of Stuttgart II | 337444 |
| Rousselet of Stuttgart V | 337445 |
| Rousselet of Stuttgart VII | 337446 |
| Rousselet of Stuttgart IX | 337448 |
| RX 196 (Beurre Clairgeau x Williams Bon Chretien) | 279936 |
| RX 226 (B. Hardy x Passe Crassane) | 279937 |
| RX 249 (Williams Bon Chretien x O.P. Sdlg.) | 2799 |

| Variety | Number |
|---|---|
| Samy's Estate | 278729 |
| Scipiona | 286220 |
| Sensation Red Bartlett | 255600 |
| Seuri | 307497 |
| Shipova | 260199 |
| Shu-li | 132103 |
| *Sion-szu-mi | 289525 |
| Sivaganga Estate | 278731 |
| Solanka | 282978 |
| Sorbus-Pyrus | 318839 |
| *Spadoncini | 318870 |
| Spina Carpi | 286221 |
| Sucre de Mountlucan | 295096 |
| Summer Blood Birne | 312507 |
| Talasova Zimni | 282979 |
| *Tamiioasa Robert | 352659 |
| Timpurii de Voinsati | 352660 |
| Toulouska pozdni | 282980 |
| Triomphe de Touraine | 137080 |
| Ubileen | 392323 |
| Verbelu | 449284 |
| Wawrzyniec | 282982 |
| Williams Precoce Morettini P-1360 | 279341 |
| Windorska | 282983 |
| Yahri | 307498 |
| Zaharoasa de Vara | 352661 |

| Species and Hybrids | Number |
|---|---|
| Pyrus amygdaliformis var. persica | 313927 |
| Pyrus calleryana 'Inunashi' | 318871 |
| Pyrus caucasica | 313929 |
| *Pyrus communis No. 510 | 392324 |
| Pyrus communis No. 980 | 392325 |
| Pyrus communis No. 3996 | 205464 |
| Pyrus communis B-11 (S. Africa) | 437066 |
| Pyrus communis B-12 (S. Africa) | 437067 |
| Pyrus communis B-53 | 337437 |
| Pyrus communis B-61 | 337438 |
| Pyrus communis B-63 | 337439 |
| Pyrus communis B-114 | 337441 |
| Pyrus communis I.P. 1100 | 324130 |
| Pyrus communis RX 196 (Beurre Clairgeau x Williams Bon Chretien) | 279936 |
| Pyrus communis RX 226 (Beurre Hardy x Passe Crassane) | 279937 |
| Pyrus communis RX 249 (Williams Bon Chretien O.P. Sdlg.) | 279938 |
| Pyrus communis RX 274 (Beurre Clairgeau O.P. Sdlg.) | 279940 |
| Pyrus communis Williams Bon Chretien M. 207 | 307508 |
| Pyrus cossonii | 316552 |
| Pyrus elaeagrifolia var. Kotschyana #17497 | 312143 |
| *Pyrus (hybrid) 'Shinseiho' | 352638 |
| Pyrus medvedevii | 313932 |
| Pyrus pyrifolia #579 | 235575 |
| Pyrus pyrifolia | 420808 |
| Pyrus pyrifolia | 352633-646 |
| Pyrus pyriolia 'Ban San Kichi' | 352639 |
| Pyrus pyrifolia 'Kimizukawase' | 352633 |
| Pyrus pyrifolia 'Kosui' | 352634 |
| *Pyrus pyrifolia 'Kosui' | 352640 |
| Pyrus pyrifolia 'Shinko' | 352635 |
| Pyrus pyrifolia 'Shinko' | 352643 |
| Pyrus pyrifolia 'Suishu' | 352645 |
| Pyrus salicifolia 'Pendula' | 304636 |
| Pyrus salvifolia | 312148 |
| Pyrus sp. crosses | B-61045 |
| Pyrus sp. (USSR) | 313935 |
| Pyrus sp. (Morocco) | 316550 |
| Pyrus sp. B-34 (USSR) | 322709 |
| Pyrus sp. B-36 (USSR) | 322710 |
| Pyrus sp. B-37 (USSR) | 322711 |
| Pyrus sp. HN No. 36 (Japan) | 358953 |
| Pyrus sp. HN No. 39 (Japan) | 358954 |
| Pyrus sp. 'Chin-shin' | 307543 |
| Pyrus sp. 'Chui-chi-li' | 307544 |
| Pyrus sp. 'Djebel Goutava' | 324121 |
| Pyrus sp. 'Hang-pa-li' | 315064 |
| Pyrus sp. 'Hua-gej' | 307545 |
| Pyrus sp. 'Tso-li' | 312509 |
| Pyrus ussuriensis 2088/62 (USSR) | 312150 |
| *Pyrus ussuriensis 2319/62 (USSR) | 312151 |
| Pyrus ussuriensis 2421/62 (USSR) | 312152 |
| Pyrus ussuriensis var. hondoensis 'Aonashi' | 318874 |
| Pyrus uyematsuana | 313939 |

| Quince | Number |
|---|---|
| Adams | 20023 |
| Cydonia oblonga | 322282 |
| Pigwa S-2 | 316668 |
| Pineapple | 337442 |
| Smyrna | 337443 |

*Contain one or more latent viruses that are already known to occur in the USA.

## Literature Cited

1. Fogle, H. W., and H. F. Winters. 1977. Fruit and Tree Nut Germplasm Resources Inventory. U.S. Department of Agriculture Publication #NE-76. 321 pp.
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3. U.S. Department of Agriculture. 1898-1980. Plant Exploration and Introduction Inventories. Nos. 1-188. Washington, D.C.
4. Waterworth, H. E. 1979. Control of Plant Disease by Exclusion: Quarantines and Disease Free Stocks. In "Pest Management." D. Pimentel, Ed. CRC Press, Gainesville, FL.
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# Bacterial Spot Susceptibility in Low Chilling Peaches[1]


W. B. Sherman and P. M. Lyrene[2]


Bacterial spot caused by *Xanthomonas pruni* (E. F. Sm.) Dows. is a major disease of peach in the more temperate regions of the Eastern United States. Breeding for resistance has been a goal in improvement programs and many new peach and nectarine cultivars have relatively high levels of resistance. Bacterial spot is common in peach growing areas of central Georgia, much less common in North Florida and until 1979 had not been observed in North-central Florida. It was mistakenly thought that the bacterium was not adapted to the North-central Florida climate but it now appears that the breeding program (about 30 years) and industry (about 15 years) were not old enough for the bacteria to have time to establish itself. However, it is conceivable that new strains of the bacteria have developed which are now adapted to lower and warmer latitudes. Finally, it may be environmental conditions have recently been unusually favorable for development of the disease, especially in 1979-80. If this is the case, a remission in bacterial spot would be expected in the following years. Seven selections and cultivars became seriously affected in 1979 in the variety test orchard of the University of Florida at Gainesville. A major outbreak of bacterial spot occurred in the same orchard in 1980 and an evaluation of susceptible and resistant germplasm was made.

Bacterial spot was present only in the southeast corner of the test block in 1979 but occurred on various clones throughout the test block in 1980. Each clone was represented by 2 to 4 trees. The trees of each clone were quite uniform in susceptibility or resistance to the disease. Both highly susceptible and resistant clones were evident in 1980. Although no attempt has been made to breed and select for bacterial spot resistance in the low chilling Florida germplasm pool, it was not surprising some clones with high resistance were found, because resistant, temperate-zone cultivars have repeatedly been incorporated into our germplasm pool in order to obtain high fruit qualities. The presence of resistance in our germplasm pool shows the value of having a widely diverse germplasm base in the breeding program. The presence of high resistance in a population not


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