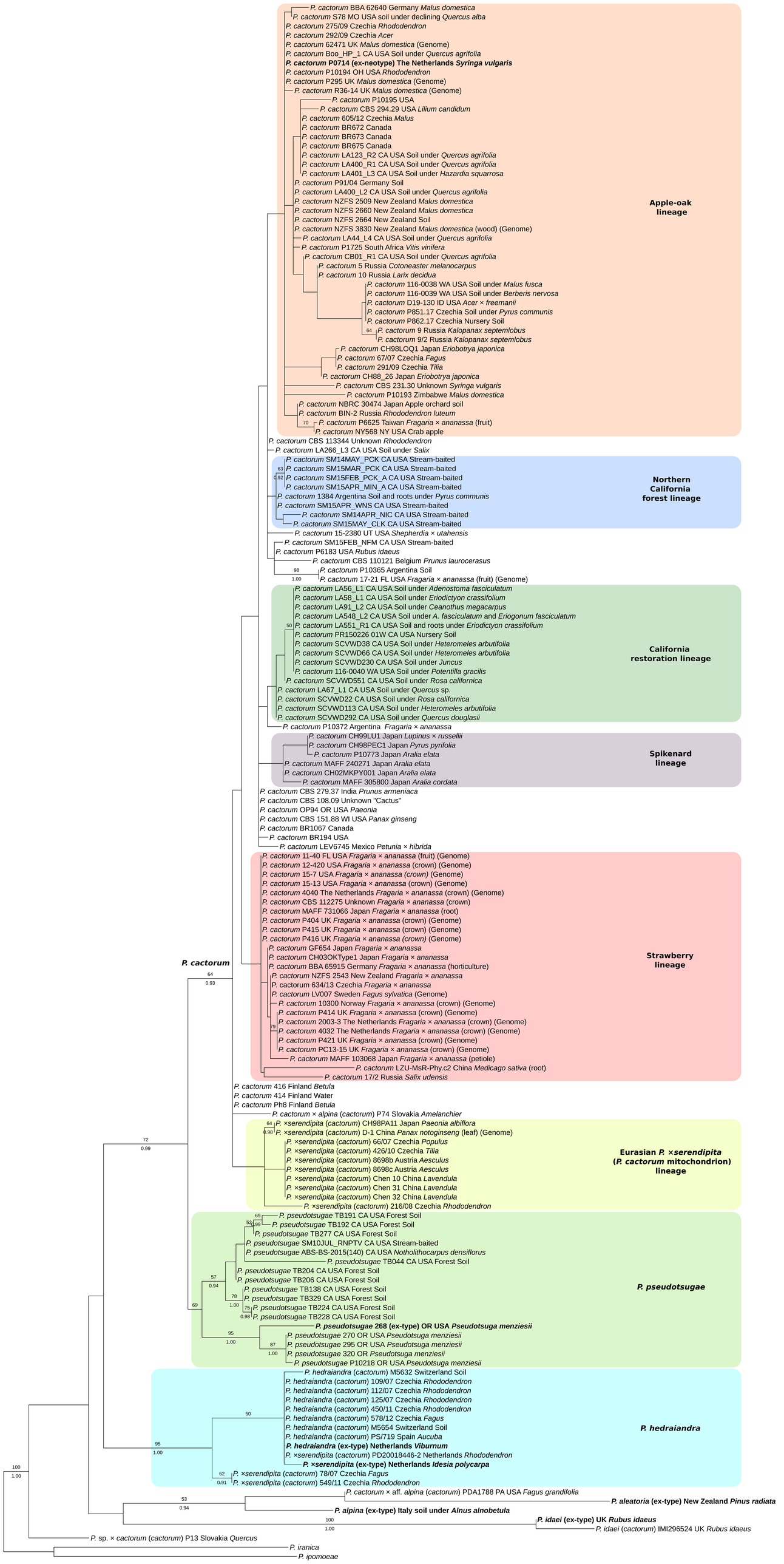
P. cactorum BBA 62640 Germany Malus domestica
P. cactorum S78 MO USA soil under declining Quercus alba
P. cactorum 275/09 Czechia Rhododendron
P. cactorum 292/09 Czechia Acer
P. cactorum 62471 UK Malus domestica (Genome)
P. cactorum Boo_HP_1 CA USA Soil under Quercus agrifolia
P. cactorum P0714 (ex-neotype) The Netherlands Syringa vulgaris
P. cactorum P10194 OH USA Rhododendron
P. cactorum P295 UK Malus domestica (Genome)
P. cactorum R36-14 UK Malus domestica (Genome)
P. cactorum P10195 USA
P. cactorum CBS 294.29 USA Lilium candidum
P. cactorum 605/12 Czechia Malus
P. cactorum BR672 Canada
P. cactorum BR673 Canada
P. cactorum BR675 Canada
P. cactorum LA123_R2 CA USA Soil under Quercus agrifolia
P. cactorum LA400_R1 CA USA Soil under Quercus agrifolia
P. cactorum LA401_L3 CA USA Soil under Hazardia squarrosa
P. cactorum P91/04 Germany Soil
P. cactorum LA400_L2 CA USA Soil under Quercus agrifolia
P. cactorum NZFS 2509 New Zealand Malus domestica
P. cactorum NZFS 2660 New Zealand Malus domestica
P. cactorum NZFS 2664 New Zealand Soil
P. cactorum NZFS 3830 New Zealand Malus domestica (wood) (Genome)
P. cactorum LA44_L4 CA USA Soil under Quercus agrifolia
P. cactorum P1725 South Africa Vitis vinifera
P. cactorum CB01_R1 CA USA Soil under Quercus agrifolia
P. cactorum 5 Russia Cotoneaster melanocarpus
P. cactorum 10 Russia Larix decidua
P. cactorum 116-0038 WA USA Soil under Malus fusca
P. cactorum 116-0039 WA USA Soil under Berberis nervosa
P. cactorum D19-130 ID USA Acer × freemanii
P. cactorum P851.17 Czechia Soil under Pyrus communis
P. cactorum P862.17 Czechia Nursery Soil
64
P. cactorum 9 Russia Kalopanax septemlobus
P. cactorum 9/2 Russia Kalopanax septemlobus
P. cactorum CH98LOQ1 Japan Eriobotrya japonica
P. cactorum 67/07 Czechia Fagus
P. cactorum 291/09 Czechia Tilia
P. cactorum CH88_26 Japan Eriobotrya japonica
P. cactorum CBS 231.30 Unknown Syringa vulgaris
P. cactorum P10193 Zimbabwe Malus domestica
P. cactorum NBRC 30474 Japan Apple orchard soil
P. cactorum BIN-2 Russia Rhododendron luteum
70
P. cactorum P6625 Taiwan Fragaria × ananassa (fruit)
P. cactorum NY568 NY USA Crab apple
Apple-oak lineage
P. cactorum CBS 113344 Unknown Rhododendron
P. cactorum LA266_L3 CA USA Soil under Salix
P. cactorum SM14MAY_PCK CA USA Stream-baited
63
P. cactorum SM15MAR_PCK CA USA Stream-baited
0.92
P. cactorum SM15FEB_PCK_A CA USA Stream-baited
P. cactorum SM15APR_MIN_A CA USA Stream-baited
P. cactorum 1384 Argentina Soil and roots under Pyrus communis
P. cactorum SM15APR_WNS CA USA Stream-baited
P. cactorum SM14APR_NIC CA USA Stream-baited
P. cactorum SM15MAY_CLK CA USA Stream-baited
Northern California forest lineage
P. cactorum 15-2380 UT USA Shepherdia × utahensis
P. cactorum SM15FEB_NFM CA USA Stream-baited
P. cactorum P6183 USA Rubus idaeus
P. cactorum CBS 110121 Belgium Prunus laurocerasus
98
1.00
P. cactorum P10365 Argentina Soil
P. cactorum 17-21 FL USA Fragaria × ananassa (fruit) (Genome)
P. cactorum LA56_L1 CA USA Soil under Adenostoma fasciculatum
P. cactorum LA58_L1 CA USA Soil under Eriodictyon crassifolium
P. cactorum LA91_L2 CA USA Soil under Ceanothus megacarpus
P. cactorum LA548_L2 CA USA Soil under A. fasciculatum and Eriogonum fasciculatum
50
P. cactorum LA551_R1 CA USA Soil and roots under Eriodictyon crassifolium
P. cactorum PR150226 01W CA USA Nursery Soil
P. cactorum SCVWD38 CA USA Soil under Heteromeles arbutifolia
P. cactorum SCVWD66 CA USA Soil under Heteromeles arbutifolia
P. cactorum SCVWD230 CA USA Soil under Juncus
P. cactorum 116-0040 WA USA Soil under Potentilla gracilis
P. cactorum SCVWD551 CA USA Soil under Rosa californica
P. cactorum LA67_L1 CA USA Soil under Quercus sp.
P. cactorum SCVWD22 CA USA Soil under Rosa californica
P. cactorum SCVWD113 CA USA Soil under Heteromeles arbutifolia
P. cactorum SCVWD292 CA USA Soil under Quercus douglasii
California restoration lineage
P. cactorum P10372 Argentina Fragaria × ananassa
P. cactorum CH99LU1 Japan Lupinus × russellii
P. cactorum CH98PEC1 Japan Pyrus pyrifolia
P. cactorum P10773 Japan Aralia elata
P. cactorum MAFF 240271 Japan Aralia elata
P. cactorum CH02MKPY001 Japan Aralia elata
P. cactorum MAFF 305800 Japan Aralia cordata
Spikenard lineage
P. cactorum CBS 279.37 India Prunus armeniaca
P. cactorum CBS 108.09 Unknown "Cactus"
P. cactorum OP94 OR USA Paeonia
P. cactorum CBS 151.88 WI USA Panax ginseng
P. cactorum BR1067 Canada
P. cactorum BR194 USA
P. cactorum LEV6745 Mexico Petunia × hibrida
P. cactorum 11-40 FL USA Fragaria × ananassa (fruit) (Genome)
P. cactorum 12-420 USA Fragaria × ananassa (crown) (Genome)
P. cactorum 15-7 USA Fragaria × ananassa (crown) (Genome)
P. cactorum 15-13 USA Fragaria × ananassa (crown) (Genome)
P. cactorum 4040 The Netherlands Fragaria × ananassa (crown) (Genome)
P. cactorum CBS 112275 Unknown Fragaria × ananassa (crown)
P. cactorum MAFF 731066 Japan Fragaria × ananassa (root)
P. cactorum P404 UK Fragaria × ananassa (crown) (Genome)
P. cactorum P415 UK Fragaria × ananassa (crown) (Genome)
P. cactorum P416 UK Fragaria × ananassa (crown) (Genome)
P. cactorum GF654 Japan Fragaria × ananassa
P. cactorum CH03OKType1 Japan Fragaria × ananassa
P. cactorum BBA 65915 Germany Fragaria × ananassa (horticulture)
P. cactorum NZFS 2543 New Zealand Fragaria × ananassa
P. cactorum 634/13 Czechia Fragaria × ananassa
P. cactorum LV007 Sweden Fagus sylvatica (Genome)
P. cactorum 10300 Norway Fragaria × ananassa (crown) (Genome)
P. cactorum P414 UK Fragaria × ananassa (crown) (Genome)
79
P. cactorum 2003-3 The Netherlands Fragaria × ananassa (crown) (Genome)
P. cactorum 4032 The Netherlands Fragaria × ananassa (crown) (Genome)
P. cactorum P421 UK Fragaria × ananassa (crown) (Genome)
P. cactorum PC13-15 UK Fragaria × ananassa (crown) (Genome)
P. cactorum MAFF 103068 Japan Fragaria × ananassa (petiole)
P. cactorum LZU-MsR-Phy.c2 China Medicago sativa (root)
P. cactorum 17/2 Russia Salix udensis
Strawberry lineage
P. cactorum
64
0.93
P. cactorum 416 Finland Betula
P. cactorum 414 Finland Water
P. cactorum Ph8 Finland Betula
P. cactorum × alpina (cactorum) P74 Slovakia Amelanchier
64
0.98
P. ×serendipita (cactorum) CH98PA11 Japan Paeonia albiflora
P. ×serendipita (cactorum) D-1 China Panax notoginseng (leaf) (Genome)
P. ×serendipita (cactorum) 66/07 Czechia Populus
P. ×serendipita (cactorum) 426/10 Czechia Tilia
P. ×serendipita (cactorum) 8698b Austria Aesculus
P. ×serendipita (cactorum) 8698c Austria Aesculus
P. ×serendipita (cactorum) Chen 10 China Lavendula
P. ×serendipita (cactorum) Chen 31 China Lavendula
P. ×serendipita (cactorum) Chen 32 China Lavendula
P. ×serendipita (cactorum) 216/08 Czechia Rhododendron
Eurasian P. ×serendipita (P. cactorum mitochondrion) lineage
72
0.99
69
P. pseudotsugae TB191 CA USA Forest Soil
52
0.99
P. pseudotsugae TB192 CA USA Forest Soil
P. pseudotsugae TB277 CA USA Forest Soil
P. pseudotsugae SM10JUL_RNPTV CA USA Stream-baited
P. pseudotsugae ABS-BS-2015(140) CA USA Notholithocarpus densiflorus
P. pseudotsugae TB044 CA USA Forest Soil
57
0.94
P. pseudotsugae TB204 CA USA Forest Soil
P. pseudotsugae TB206 CA USA Forest Soil
78
1.00
P. pseudotsugae TB138 CA USA Forest Soil
P. pseudotsugae TB329 CA USA Forest Soil
75
0.98
P. pseudotsugae TB224 CA USA Forest Soil
P. pseudotsugae TB228 CA USA Forest Soil
P. pseudotsugae 268 (ex-type) OR USA Pseudotsuga menziesii
95
1.00
87
1.00
P. pseudotsugae 270 OR USA Pseudotsuga menziesii
P. pseudotsugae 295 OR USA Pseudotsuga menziesii
P. pseudotsugae 320 OR Pseudotsuga menziesii
P. pseudotsugae P10218 OR USA Pseudotsuga menziesii
P. pseudotsugae
P. hedraiandra (cactorum) M5632 Switzerland Soil
P. hedraiandra (cactorum) 109/07 Czechia Rhododendron
P. hedraiandra (cactorum) 112/07 Czechia Rhododendron
P. hedraiandra (cactorum) 125/07 Czechia Rhododendron
P. hedraiandra (cactorum) 450/11 Czechia Rhododendron
50
P. hedraiandra (cactorum) 578/12 Czechia Fagus
P. hedraiandra (cactorum) M5654 Switzerland Soil
P. hedraiandra (cactorum) PS/719 Spain Aucuba
P. hedraiandra (ex-type) Netherlands Viburnum
P. ×serendipita (cactorum) PD20018446-2 Netherlands Rhododendron
P. ×serendipita (ex-type) Netherlands Idesia polycarpa
95
1.00
62
0.91
P. ×serendipita (cactorum) 78/07 Czechia Fagus
P. ×serendipita (cactorum) 549/11 Czechia Rhododendron
P. hedraiandra
100
1.00
P. cactorum × aff. alpina (cactorum) PDA1788 PA USA Fagus grandifolia
53
0.94
P. aleatoria (ex-type) New Zealand Pinus radiata
P. alpina (ex-type) Italy soil under Alnus alnobetula
100
1.00
P. idaei (ex-type) UK Rubus idaeus
P. idaei (cactorum) IMI296524 UK Rubus idaeus
P. sp. × cactorum (cactorum) P13 Slovakia Quercus
P. iranica
P. ipomoeae