> dis\_tleaf

$populations

$populations$dissimilarity

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS 0.0000000 0.2987946 0.3671766 0.2718657 0.4741073 0.3580879

100PLS 0.2987946 0.0000000 0.3158217 0.2030521 0.3002239 0.1849816

200PLS 0.3671766 0.3158217 0.0000000 0.2583913 0.2750703 0.2045128

500PLS 0.2718657 0.2030521 0.2583913 0.0000000 0.4235345 0.1769536

1000PLS 0.4741073 0.3002239 0.2750703 0.4235345 0.0000000 0.3256115

3000PLS 0.3580879 0.1849816 0.2045128 0.1769536 0.3256115 0.0000000

$populations$P\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.8959638 0.9726449 0.9541005 0.8353256 0.9162976

100PLS 0.8959638 NA 1.0000000 0.9832394 0.9546975 0.9947088

200PLS 0.9726449 1.0000000 NA 1.0000000 0.9380679 1.0000000

500PLS 0.9541005 0.9832394 1.0000000 NA 0.9147862 0.9411048

1000PLS 0.8353256 0.9546975 0.9380679 0.9147862 NA 0.9718541

3000PLS 0.9162976 0.9947088 1.0000000 0.9411048 0.9718541 NA

$populations$P\_non\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.104036229 0.02735511 0.04589945 0.16467436 0.083702371

100PLS 0.10403623 NA 0.00000000 0.01676058 0.04530255 0.005291164

200PLS 0.02735511 0.000000000 NA 0.00000000 0.06193213 0.000000000

500PLS 0.04589945 0.016760585 0.00000000 NA 0.08521380 0.058895156

1000PLS 0.16467436 0.045302547 0.06193213 0.08521380 NA 0.028145923

3000PLS 0.08370237 0.005291164 0.00000000 0.05889516 0.02814592 NA

dis\_troot

$populations

$populations$dissimilarity

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS 0.0000000 0.30338416 0.31937705 0.33404439 0.31861081 0.29322674

100PLS 0.3033842 0.00000000 0.05217546 0.08057818 0.07993199 0.05879062

200PLS 0.3193770 0.05217546 0.00000000 0.09801411 0.04998231 0.05047067

500PLS 0.3340444 0.08057818 0.09801411 0.00000000 0.12461501 0.09233259

1000PLS 0.3186108 0.07993199 0.04998231 0.12461501 0.00000000 0.06437437

3000PLS 0.2932267 0.05879062 0.05047067 0.09233259 0.06437437 0.00000000

$populations$P\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.5784300 0.6166310 0.5191782 0.5907278 0.6256966

100PLS 0.5784300 NA 1.0000000 1.0000000 0.9600942 1.0000000

200PLS 0.6166310 1.0000000 NA 1.0000000 0.9371943 1.0000000

500PLS 0.5191782 1.0000000 1.0000000 NA 1.0000000 1.0000000

1000PLS 0.5907278 0.9600942 0.9371943 1.0000000 NA 1.0000000

3000PLS 0.6256966 1.0000000 1.0000000 1.0000000 1.0000000 NA

$populations$P\_non\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.42156995 0.38336900 0.4808218 0.40927218 0.3743034

100PLS 0.4215700 NA 0.00000000 0.0000000 0.03990581 0.0000000

200PLS 0.3833690 0.00000000 NA 0.0000000 0.06280575 0.0000000

500PLS 0.4808218 0.00000000 0.00000000 NA 0.00000000 0.0000000

1000PLS 0.4092722 0.03990581 0.06280575 0.0000000 NA 0.0000000

3000PLS 0.3743034 0.00000000 0.00000000 0.0000000 0.00000000 NA

> dis\_twood

$populations

$populations$dissimilarity

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS 0.0000000 1.0000000 0.9724220 0.9541012 0.9724220 0.8071704

100PLS 1.0000000 0.0000000 0.7700436 0.8699170 0.9211043 0.9823252

200PLS 0.9724220 0.7700436 0.0000000 0.2853897 0.3928118 0.9005956

500PLS 0.9541012 0.8699170 0.2853897 0.0000000 0.2229523 0.8535014

1000PLS 0.9724220 0.9211043 0.3928118 0.2229523 0.0000000 0.8973038

3000PLS 0.8071704 0.9823252 0.9005956 0.8535014 0.8973038 0.0000000

$populations$P\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.0000000 0.07005166 0.1814348 0.2745659 0.8712948

100PLS 0.00000000 NA 0.65464431 0.5645134 0.5718099 0.4852615

200PLS 0.07005166 0.6546443 NA 0.9805869 1.0000000 0.9514219

500PLS 0.18143482 0.5645134 0.98058690 NA 1.0000000 0.9740980

1000PLS 0.27456592 0.5718099 1.00000000 1.0000000 NA 0.9859659

3000PLS 0.87129475 0.4852615 0.95142189 0.9740980 0.9859659 NA

$populations$P\_non\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 1.0000000 0.92994834 0.81856518 0.72543408 0.12870525

100PLS 1.0000000 NA 0.34535569 0.43548665 0.42819011 0.51473853

200PLS 0.9299483 0.3453557 NA 0.01941310 0.00000000 0.04857811

500PLS 0.8185652 0.4354866 0.01941310 NA 0.00000000 0.02590204

1000PLS 0.7254341 0.4281901 0.00000000 0.00000000 NA 0.01403414

3000PLS 0.1287052 0.5147385 0.04857811 0.02590204 0.01403414 NA

> dis\_aleaf

$populations

$populations$dissimilarity

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS 0.0000000 0.1186149 0.2907971 0.3090095 0.4875677 0.4109189

100PLS 0.1186149 0.0000000 0.2558387 0.2772297 0.4486881 0.3720393

200PLS 0.2907971 0.2558387 0.0000000 0.1051230 0.2184827 0.1349936

500PLS 0.3090095 0.2772297 0.1051230 0.0000000 0.2777126 0.1873398

1000PLS 0.4875677 0.4486881 0.2184827 0.2777126 0.0000000 0.1327579

3000PLS 0.4109189 0.3720393 0.1349936 0.1873398 0.1327579 0.0000000

$populations$P\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 1.0000000 1.0000000 0.9805155 0.7768348 0.8134830

100PLS 1.0000000 NA 0.9627197 0.9674368 0.7637664 0.8183746

200PLS 1.0000000 0.9627197 NA 1.0000000 0.9822083 0.9506483

500PLS 0.9805155 0.9674368 1.0000000 NA 0.8318718 0.8458487

1000PLS 0.7768348 0.7637664 0.9822083 0.8318718 NA 1.0000000

3000PLS 0.8134830 0.8183746 0.9506483 0.8458487 1.0000000 NA

$populations$P\_non\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.00000000 0.00000000 0.01948453 0.22316518 0.18651697

100PLS 0.00000000 NA 0.03728033 0.03256320 0.23623356 0.18162541

200PLS 0.00000000 0.03728033 NA 0.00000000 0.01779173 0.04935169

500PLS 0.01948453 0.03256320 0.00000000 NA 0.16812816 0.15415128

1000PLS 0.22316518 0.23623356 0.01779173 0.16812816 NA 0.00000000

3000PLS 0.18651697 0.18162541 0.04935169 0.15415128 0.00000000 NA

dis\_aroot

$populations

$populations$dissimilarity

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS 0.0000000 0.2244479 0.1869983 0.1848317 0.15016108 0.15410073

100PLS 0.2244479 0.0000000 0.1791040 0.1285557 0.21724020 0.20723444

200PLS 0.1869983 0.1791040 0.0000000 0.1143181 0.14162809 0.11422683

500PLS 0.1848317 0.1285557 0.1143181 0.0000000 0.15613904 0.11914297

1000PLS 0.1501611 0.2172402 0.1416281 0.1561390 0.00000000 0.05936322

3000PLS 0.1541007 0.2072344 0.1142268 0.1191430 0.05936322 0.00000000

$populations$P\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.5872889 0.8407024 0.7699850 1.0000000 0.9803971

100PLS 0.5872889 NA 0.9791517 0.9269457 0.9770315 0.9513576

200PLS 0.8407024 0.9791517 NA 1.0000000 1.0000000 0.9575378

500PLS 0.7699850 0.9269457 1.0000000 NA 1.0000000 0.9769967

1000PLS 1.0000000 0.9770315 1.0000000 1.0000000 NA 1.0000000

3000PLS 0.9803971 0.9513576 0.9575378 0.9769967 1.0000000 NA

$populations$P\_non\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.41271108 0.15929756 0.23001496 0.00000000 0.01960291

100PLS 0.41271108 NA 0.02084830 0.07305428 0.02296847 0.04864242

200PLS 0.15929756 0.02084830 NA 0.00000000 0.00000000 0.04246223

500PLS 0.23001496 0.07305428 0.00000000 NA 0.00000000 0.02300329

1000PLS 0.00000000 0.02296847 0.00000000 0.00000000 NA 0.00000000

3000PLS 0.01960291 0.04864242 0.04246223 0.02300329 0.00000000 NA

dis\_awood

$populations

$populations$dissimilarity

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS 0.0000000 0.2351830 0.3983246 0.3280958 0.5165452 0.4711963

100PLS 0.2351830 0.0000000 0.3420692 0.2537182 0.4155524 0.4000052

200PLS 0.3983246 0.3420692 0.0000000 0.1001587 0.1397810 0.1037295

500PLS 0.3280958 0.2537182 0.1001587 0.0000000 0.1948371 0.1669054

1000PLS 0.5165452 0.4155524 0.1397810 0.1948371 0.0000000 0.1066072

3000PLS 0.4711963 0.4000052 0.1037295 0.1669054 0.1066072 0.0000000

$populations$P\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.7896188 1 0.9825619 1 1

100PLS 0.7896188 NA 1 0.9878213 1 1

200PLS 1.0000000 1.0000000 NA 1.0000000 1 1

500PLS 0.9825619 0.9878213 1 NA 1 1

1000PLS 1.0000000 1.0000000 1 1.0000000 NA 1

3000PLS 1.0000000 1.0000000 1 1.0000000 1 NA

$populations$P\_non\_shared

50PLS 100PLS 200PLS 500PLS 1000PLS 3000PLS

50PLS NA 0.21038124 0 0.01743814 0 0

100PLS 0.21038124 NA 0 0.01217869 0 0

200PLS 0.00000000 0.00000000 NA 0.00000000 0 0

500PLS 0.01743814 0.01217869 0 NA 0 0

1000PLS 0.00000000 0.00000000 0 0.00000000 NA 0

3000PLS 0.00000000 0.00000000 0 0.00000000 0 NA