

Table S1 Haplotypes of *Quambalaria* species as determined from the polymorphic nucleotides within the aligned sequence data of ITS region and the partial LSU gene for isolates in this study and in previous studies

| Identity | Isolate No. ^a | GenBank accession no. | | Haplotype ^b | |
|-----------------------------|--------------------------|-----------------------|------------------|------------------------|------|
| | | ITS | LSU | ITS | LSU |
| <i>Quambalaria coyrecup</i> | WAC12947 | DQ823431 | DQ823444 | QCO1 | QCO1 |
| <i>Q. coyrecup</i> | WAC12948 | DQ823433 | DQ823446 | QCO1 | QCO1 |
| <i>Q. coyrecup</i> | WAC12949 | DQ823432 | DQ823445 | QCO1 | QCO1 |
| <i>Q. coyrecup</i> | WAC12950 | DQ823429 | DQ823447 | QCO2 | QCO1 |
| <i>Q. coyrecup</i> | WAC12951 | DQ823430 | DQ823448 | QCO2 | QCO1 |
| <i>Q. coyrecup</i> | BRIP48338 | EF444877 | N/A ^c | QCO3 | N/A |
| <i>Q. coyrecup</i> | BRIP48339 | EF444878 | N/A | QCO3 | N/A |
| <i>Q. cyanescens</i> | CBS357.73 = CMW5583 | DQ317622 | DQ317615 | QCY1 | QCY1 |
| <i>Q. cyanescens</i> | CBS876.73 = CMW5584 | DQ317623 | DQ317616 | QCY2 | QCY1 |
| <i>Q. cyanescens</i> | WAC12952 | DQ823419 | DQ823440 | QCY3 | QCY1 |
| <i>Q. cyanescens</i> | WAC12953 | DQ823422 | DQ823443 | QCY5 | QCY2 |
| <i>Q. cyanescens</i> | WAC12954 | DQ823420 | DQ823442 | QCY3 | QCY1 |
| <i>Q. cyanescens</i> | WAC12955 | DQ823421 | DQ823441 | QCY4 | QCY1 |
| <i>Q. cyanescens</i> | BRIP48396 ^e | EF444874 | N/A | QCY7 | N/A |
| <i>Q. cyanescens</i> | BRIP48398 ^e | EF444875 | N/A | QCY6 | N/A |
| <i>Q. cyanescens</i> | BRIP48403 ^e | EF444876 | N/A | QCY3 | N/A |
| <i>Q. eucalypti</i> | CBS118844 = CMW1101 | DQ317625 | DQ317618 | QE1 | QE1 |
| <i>Q. eucalypti</i> | CBS 119680 = CMW11678 | DQ317626 | DQ317619 | QE1 | QE1 |
| <i>Q. eucalypti</i> | CMW14329 | DQ317614 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | CBS118615 = CMW17252 | DQ317609 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | CMW17253 | DQ317610 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | CMW17254 | DQ317611 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | CMW17255 | DQ317612 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | CBS118616 = CMW17771 | DQ317613 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | UY1036 | EU439922 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | UY1718 | EU439923 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE3/MEAN 996 | JX297605 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE6/MEAN 997 | JX297603 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE27/MEAN 998 | JX297604 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE28/MEAN 999 | JX297600 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE29/MEAN 1000 | JX297602 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE30/MEAN 1001 | JX297601 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE52/MEAN 1002 | JX297606 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE53/MEAN 1003 | JX297598 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE54/MEAN 1004 | JX297599 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE93/MEAN 1006 | KR336802 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE96/MEAN 1009 | KR336803 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE151/MEAN 1012 | KR336804 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE152/MEAN 1013 | KR336805 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE153/MEAN 1014 | KR336806 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | PE154/MEAN 1015 | KR336807 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | BRIP48367 | EF444823 | N/A | QE1 | N/A |
| <i>Q. eucalypti</i> | BRIP48422 | EF444832 | N/A | QE2 | N/A |
| <i>Q. eucalypti</i> | BRIP48498 | EF444844 | N/A | QE3 | N/A |

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|---------------------|---------------------|----------|----------|-------|-----|
| <i>Q. eucalypti</i> | BRIP48507 | EF444822 | N/A | QE4 | N/A |
| <i>Q. eucalypti</i> | CERC8476 | KY615009 | N/A | QE2 | N/A |
| <i>Q. eucalypti</i> | CERC8477 | KY615010 | N/A | QE2 | N/A |
| <i>Q. eucalypti</i> | CERC8478 | KY615011 | N/A | QE2 | N/A |
| <i>Q. eucalypti</i> | CERC8479 | KY615012 | KY615050 | QE2 | QE1 |
| <i>Q. eucalypti</i> | CERC8480 | KY615013 | N/A | QE2 | N/A |
| <i>Q. eucalypti</i> | CERC8481 | KY615014 | KY615051 | QE2 | QE1 |
| <i>Q. eucalypti</i> | CERC8482 | KY615015 | N/A | QE2 | N/A |
| <i>Q. eucalypti</i> | CERC8483 | KY615016 | N/A | QE2 | N/A |
| <i>Q. pitereka</i> | DAR19773 | DQ823423 | DQ823438 | QP1 | QP1 |
| <i>Q. pitereka</i> | CMW 6707 | DQ317627 | DQ317620 | QP2 | QP1 |
| <i>Q. pitereka</i> | CBS118828 = CMW5318 | DQ317628 | DQ317621 | QP2 | QP1 |
| <i>Q. pitereka</i> | CMW23610 | EF427372 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CMW23611 | EF427373 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CMW23612 | EF427374 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CMW23613 | EF427375 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | BRIP48325 | EF427366 | N/A | QP7 | N/A |
| <i>Q. pitereka</i> | BRIP48361 | EF427367 | N/A | QP3 | N/A |
| <i>Q. pitereka</i> | BRIP48370 | EF427368 | N/A | QP6 | N/A |
| <i>Q. pitereka</i> | BRIP48384 | EF427369 | N/A | QP8 | N/A |
| <i>Q. pitereka</i> | BRIP48386 | EF427370 | N/A | QP7 | N/A |
| <i>Q. pitereka</i> | BRIP48531 | EF427371 | N/A | QP 11 | N/A |
| <i>Q. pitereka</i> | WAC12957 | DQ823426 | DQ823437 | QP5 | QP1 |
| <i>Q. pitereka</i> | WAC12958 | DQ823427 | DQ823436 | QP5 | QP1 |
| <i>Q. pitereka</i> | QP26 | DQ823424 | DQ823434 | QP1 | QP1 |
| <i>Q. pitereka</i> | QP45 | DQ823425 | DQ823439 | QP 12 | QP1 |
| <i>Q. pitereka</i> | BRIP48346 | EF444845 | N/A | QP1 | N/A |
| <i>Q. pitereka</i> | BRIP48317 | EF444854 | N/A | QP2 | N/A |
| <i>Q. pitereka</i> | BRIP48381 | EF444858 | N/A | QP3 | N/A |
| <i>Q. pitereka</i> | BRIP48383 | EF444859 | N/A | QP4 | N/A |
| <i>Q. pitereka</i> | WAC12956 | DQ823428 | N/A | QP5 | N/A |
| <i>Q. pitereka</i> | BRIP48349 | EF444860 | N/A | QP6 | N/A |
| <i>Q. pitereka</i> | BRIP48325 | EF427366 | N/A | QP7 | N/A |
| <i>Q. pitereka</i> | BRIP48328 | EF444872 | N/A | QP8 | N/A |
| <i>Q. pitereka</i> | BRIP48432 | EF444873 | N/A | QP9 | N/A |
| <i>Q. pitereka</i> | CERC8486 | KY615017 | KY615052 | QP10 | QP2 |
| <i>Q. pitereka</i> | CERC8488 | KY615018 | KY615053 | QP10 | QP2 |
| <i>Q. pitereka</i> | CERC8489 | KY615019 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC8491 | KY615020 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC8494 | KY615021 | KY615054 | QP10 | QP2 |
| <i>Q. pitereka</i> | CERC9093 | KY615022 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC9094 | KY615023 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC9095 | KY615024 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC9096 | KY615025 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC9097 | KY615026 | KY615055 | QP10 | QP2 |
| <i>Q. pitereka</i> | CERC9098 | KY615027 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC9099 | KY615028 | KY615056 | QP10 | QP2 |
| <i>Q. pitereka</i> | CERC9100 | KY615029 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC9101 | KY615030 | N/A | QP10 | N/A |

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|------------------------------|-----------------|----------|----------|------|-----|
| <i>Q. pitereka</i> | CERC9102 | KY615031 | N/A | QP10 | N/A |
| <i>Q. pitereka</i> | CERC9103 | KY615032 | KY615057 | QP10 | QP2 |
| <i>Q. pitereka</i> | CERC9104 | KY615033 | N/A | QP10 | N/A |
| <i>Q. simpsonii</i> | CBS 124772 | GQ303290 | GQ303321 | QS1 | QS1 |
| <i>Q. simpsonii</i> | CBS 124773 | GQ303291 | GQ303322 | QS2 | QS1 |
| <i>Q. simpsonii</i> | CERC8496 | KY615034 | N/A | QS3 | N/A |
| <i>Q. simpsonii</i> | CERC8499 | KY615035 | N/A | QS3 | N/A |
| <i>Q. simpsonii</i> | CERC8505 | KY615036 | N/A | QS5 | N/A |
| <i>Q. simpsonii</i> | CERC8507 | KY615037 | KY615058 | QS3 | QS1 |
| <i>Q. simpsonii</i> | CERC8512 | KY615038 | N/A | QS4 | N/A |
| <i>Q. simpsonii</i> | CERC8514 | KY615039 | N/A | QS4 | N/A |
| <i>Q. simpsonii</i> | CERC8516 | KY615040 | N/A | QS4 | N/A |
| <i>Q. simpsonii</i> | CERC8517 | KY615041 | KY615059 | QS4 | QS1 |
| <i>Q. simpsonii</i> | CERC8519 | KY615042 | N/A | QS4 | N/A |
| <i>Q. simpsonii</i> | CERC8526 | KY615043 | N/A | QS3 | N/A |
| <i>Q. simpsonii</i> | CERC8532 | KY615044 | N/A | QS5 | N/A |
| <i>Q. simpsonii</i> | CERC8534 | KY615045 | KY615060 | QS6 | QS1 |
| <i>Q. simpsonii</i> | CERC8536 | KY615046 | KY615061 | QS6 | QS1 |
| <i>Q. simpsonii</i> | CERC8539 | KY615047 | KY615062 | QS5 | QS1 |
| <i>Q. simpsonii</i> | CERC8541 | KY615048 | N/A | QS6 | N/A |
| <i>Q. simpsonii</i> | CERC8543 | KY615049 | N/A | QS5 | N/A |
| <i>Microstroma juglandis</i> | R.B. 2042 | DQ317634 | DQ317617 | | |

Note: ^a Designation of isolates and culture collections: WAC, Department of Agriculture Western Australia Plant Pathogen Collection, Perth, Australia; BRIP, the plant pathology herbarium for Queensland Department of Primary Industries and Fisheries, Australia; CBS, Centraalbureau voor Schimmelcultures, Utrecht, The Netherlands; CMW, Tree Protection Co-operative Program, Forestry and Agricultural Biotechnology Institute, University of Pretoria, South Africa; CERC, China Eucalypt Research Centre (CERC), Chinese Academy of Forestry (CAF), ZhanJiang, GuangDong, China; DAR, the plant pathology herbarium for the Department of Agriculture in NSW, Australia; MEAN, fungal collection of Instituto Nacional de Investiga ção Agr ária e Veterin ária – INIAV, Oeiras, Portugal; R.B., Herbarium R. Bauer, T übingen, Germany; Isolate numbers in boldface were collected in this study; ^b Haplotype designed by ITS and LSU sequences, respectively. QCO = *Q. coyrecup*, QCY = *Q. cyanescens*, QE = *Q. eucalypti*, QP = *Q. pitereka*, QS = *Q. simpsonii*. For haplotype designed by ITS sequences, the QP1 to QP10, and QE1 to QE4 are consistent with the haplotypes in Pegg et al. 2008, the rest haplotypes designed by ITS and LSU sequences were generated in this study; ^c N/A = not available.