**Table. S2 Primers about sequences amplication and sequencing**

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| --- | --- | --- | --- |
| Sequence | Primers（5’-3’） | Reference | Amplication protocol |
| ITS  *trn*L-F | 18S dir: CGTAACAAGGTTTCCGTAGG | Venora et al., 2000 [1] | 92°C 3min; 95°C 30s, 50°C 30s, 72°C 1min, 30cycles; 72°C 7min  94°C 2min; 94°C 1min, 50°C 30s, 72°C 1min, 30cycles; 72°C 7min |
| ITS4: TCCTCCGCTTATTGATATGC | White et al., 1990 [2] |
| c: CGAAATCGGTAGACGCTACG  d: GGGGATAGAGGGACTTGAAC  e: GGTTCAAGTCCCTCTATCCC | Taberlet et al., 1991 [3]  Taberlet et al., 1991 [3]  Taberlet et al., 1991 [3] |
| *mat*K 1  *mat*K 2 | f: ATTTGAACTGGTGACACGAG | Taberlet et al., 1991 [3] | 80°C 5min; 95°C 1min, 51°C 1min, 65°C 4min, 30cycles; 65°C 5min |
| 19F: CGTTCTGACCATATTGCACTATG  834R: AAAGACTCCARAAGATRTTG | Molvray et al., 2000 [4]  Kocyan et al., 2004 [5] |
| 731F :TCTGGAGTCTTTCTTGAGCGA  580F: ACTAATACCCYATCCCATMC  trnK2R: AACTAGTCGGATGGAGTAG) | Gervendeel et al., 2001 [6]  Kocyan et al., 2004 [5]  Johnson & Soltis, 1994 [7] |

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