**Eletronic Supplementary Material**

**Suppl. Material 1.** Specimens used to obtain NIR spectra.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| n | Species | Voucher | Date | Collection |
| 1 | *Chromolucuma brevipedicellata* | *C. C. Vasconcelos et al. 70* | 05 Dec 2015 | INPA |
| 2 | *Chromolucuma brevipedicellata* | *Equipe Fito 114497* | n.d. | HUAM |
| 3 | *Chromolucuma brevipedicellata* | *Equipe Fito 135202* | n.d. | HUAM |
| 4 | *Chromolucuma brevipedicellata* | *Equipe Fito 210653* | n.d. | HUAM |
| 5 | *Chromolucuma brevipedicellata* | *Equipe Fito 30414* | 09 Dec 2005 | INPA |
| 6 | *Chromolucuma brevipedicellata* | *Equipe Fito 41703* | n.d. | INPA |
| 7 | *Chromolucuma brevipedicellata* | *Equipe Fito 53738* | n.d. | HUAM |
| 8 | *Chromolucuma brevipedicellata* | *Equipe Fito 7962* | n.d. | HUAM |
| 9 | *Chromolucuma brevipedicellata* | *Equipe Fito 81063* | n.d. | INPA |
| 10 | *Chromolucuma brevipedicellata* | *Equipe PP 110929* | n.d. | HUAM |
| 11 | *Chromolucuma brevipedicellata* | *Equipe PP 2108185-2005* | 01 Feb 2005 | HUAM |
| 12 | *Chromolucuma brevipedicellata* | *Equipe PP 23034310* | 15 Feb 2005 | HUAM |
| 13 | *Chromolucuma brevipedicellata* | *Equipe PP 62485* | 13 Oct 2007 | INPA |
| 14 | *Chromolucuma brevipedicellata* | *M. H. Terra-Araujo 1096* | 27 Jul 2014 | INPA |
| 15 | *Chromolucuma brevipedicellata* | *T. C. R. Carvalho 364* | 26 May 2014 | INPA |
| 16 | *Chromolucuma rubriflora* | *Equipe Fito 10828* | n.d. | PDBFF |
| 17 | *Chromolucuma rubriflora* | *Equipe Fito 157* | n.d. | PDBFF |
| 18 | *Chromolucuma rubriflora* | *Equipe Fito 75792* | n.d. | PDBFF |
| 19 | *Chromolucuma rubriflora* | *F.C. Freitas 96* | 7 Mar 2017 | PDBFF |
| 20 | *Chromolucuma rubriflora* | *R. V. Almeida 3423* | 13 Mar 2017 | PDBFF |
| 21 | *Chromolucuma rubriflora* | *T. C. R. Carvalho 171* | 12 May 2014 | PDBFF |
| 22 | *Pouteria flavilatex* | *Equipe Fito 114879* | n.d. | PDBFF |
| 23 | *Pouteria flavilatex* | *Equipe PP 1104-58* | n.d. | PDBFF |
| 24 | *Pouteria flavilatex* | *Equipe PP 1202-3084* | n.d. | PDBFF |
| 25 | *Pouteria flavilatex* | *Equipe PP 1202-3371* | n.d. | PDBFF |
| 26 | *Pouteria flavilatex* | *Equipe PP 1202-650* | n.d. | PDBFF |
| 27 | *Pouteria flavilatex* | *Equipe PP 2303-1650* | n.d. | PDBFF |
| 28 | *Pouteria flavilatex* | *Equipe PP 2303-3708* | n.d. | PDBFF |
| 29 | *Pouteria flavilatex* | *Equipe PP 3114-6656* | n.d. | PDBFF |
| 30 | *Pouteria flavilatex* | *Equipe PP 3304-6068* | n.d. | PDBFF |
| 31 | *Pouteria flavilatex* | *Equipe PP 62022* | n.d. | PDBFF |
| 32 | *Pouteria flavilatex* | *Equipe PP 62551* | n.d. | PDBFF |
| 33 | *Pouteria flavilatex* | *Equipe PP 64895* | n.d. | PDBFF |
| 34 | *Pouteria flavilatex* | *Equipe PP 66789* | n.d. | PDBFF |
| 35 | *Pouteria flavilatex* | *Equipe PP 69484* | n.d. | PDBFF |
| 36 | *Pouteria flavilatex* | *Equipe PP 70759* | n.d. | PDBFF |
| 37 | *Pouteria flavilatex* | *Equipe PP 73603* | n.d. | PDBFF |
| 38 | *Pouteria flavilatex* | *Equipe PP 77462* | n.d. | PDBFF |
| 39 | *Pouteria flavilatex* | *Equipe PP 78193* | n.d. | PDBFF |
| 40 | *Pouteria flavilatex* | *Equipe PP 86804* | n.d. | PDBFF |
| 41 | *Pouteria flavilatex* | *Equipe PP 86847* | n.d. | PDBFF |
| 42 | *Pouteria williamii* | *A. A. Oliveira 415* | 5 Apr 1992 | INPA |
| 43 | *Pouteria williamii* | *A. R. Oliveira s.n.* | 5 Oct 1976 | INPA |
| 44 | *Pouteria williamii* | *C. A. Sothers 253* | 28 Oct 1994 | INPA |
| 45 | *Pouteria williamii* | *C. V. Castilho 372* | 15 Nov 2001 | INPA |
| 46 | *Pouteria williamii* | *C. V. Castilho 454* | 07 Dec 2001 | INPA |
| 47 | *Pouteria williamii* | *E. Ferreira 57-19* | 26 Feb 1957 | INPA |
| 48 | *Pouteria williamii* | *W. A. Rodrigues 9546* | 13 Oct 1965 | INPA |

**Suppl. Material 2. A.** The average spectrum of each species. **B.** Confusion matrix for results of Leave-One-Out Cross-Validation (LOOCV) discriminant analyses. The given species names are shown in columns, while predicted names are given in rows. Therefore, the values on the diagonal are the correct predictions, and off-diagonal values are erroneous predictions.



**Suppl. Material 3.** Graphic representation of Non-Metric Multidimensional Scaling analysis (NMDS) of the new species and three related species in spectral space.

