

## Supplementary Material

### **Systematics of the *Ogyris aenone* (Waterhouse, 1902) complex (Lepidoptera: Lycaenidae): threatened Australian butterflies of national conservation significance**

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**Table S1.** GenBank Accession numbers and general locality information for the specimens sequenced.

| <i>COI</i> | <i>cytb</i> | <b>Taxon</b>                               | <b>Voucher code</b> | <b>Site (general locality, state)</b> |
|------------|-------------|--------------------------------------------|---------------------|---------------------------------------|
| OP311762   | OP311794    | <i>Acrodipsas myrmecophilla</i> (outgroup) | NUOE288654          | Callum Brae NR, ACT                   |
| OP311763   | OP311795    | <i>Lucia limbaria</i> (outgroup)           | NUOE289060          | North Lyneham, ACT                    |
| OP311764   | OP311796    | <i>Ogyris aenone</i>                       | NUOE285365          | Port Douglas, Qld                     |
| OP311765   | OP311797    | <i>Ogyris aenone</i>                       | NUOE285392          | Port Douglas, Qld                     |
| OP311766   | OP311798    | <i>Ogyris aenone</i>                       | NUOE289051          | Port Douglas, Qld                     |
| OP311767   | OP311799    | <i>Ogyris aenone</i>                       | NUOE289343          | 17 km SE Cardwell, Qld                |
| OP311768   | OP311800    | <i>Ogyris aenone</i>                       | NUOE289422          | 17 km SE Cardwell, Qld                |
| OP311769   | OP311801    | <i>Ogyris aenone</i>                       | NUOE289440          | 17 km SE Cardwell, Qld                |
| OP311770   | OP311802    | <i>Ogyris aenone</i>                       | NUOE289565          | 17 km SE Cardwell, Qld                |
| OP311771   | OP311803    | <i>Ogyris aenone</i>                       | NUOE297412          | Port Douglas, Qld                     |
| OP311772   | OP311804    | <i>Ogyris ianthis</i>                      | NUOE285037          | Pilliga SCA, NSW                      |
| OP311773   | OP311805    | <i>Ogyris ianthis</i>                      | NUOE285082          | Pilliga SCA, NSW                      |
| OP311774   | OP311806    | <i>Ogyris ianthis</i>                      | NUOE285204          | Pilliga SCA, NSW                      |
| OP311775   | OP311807    | <i>Ogyris ianthis</i>                      | NUOE288627          | Pilliga SCA, NSW                      |
| OP311776   | OP311808    | <i>Ogyris ianthis</i>                      | NUOE288803          | 6 km NE Leyburn, Qld                  |
| OP311777   | OP311809    | <i>Ogyris ianthis</i>                      | NUOE288812          | Pilliga SCA, NSW                      |
| OP311778   | OP311810    | <i>Ogyris ianthis</i>                      | NUOE288858          | 6 km NE Leyburn, Qld                  |
| OP311779   | OP311811    | <i>Ogyris ianthis</i>                      | NUOE289103          | 6 km NE Leyburn, Qld                  |
| OP311780   | OP311812    | <i>Ogyris ianthis</i>                      | NUOE289237          | 6 km NE Leyburn, Qld                  |
| OP311781   | OP311813    | <i>Ogyris ianthis</i>                      | NUOE289282          | Ingleside, NSW                        |
| -          | OP311814    | <i>Ogyris ianthis</i>                      | NUOE297050          | Yuleba, Qld                           |
| OP311782   | OP311827    | <i>Ogyris iphis doddi</i>                  | NUOE288885          | Cobourg Pen., NT                      |
| OP311783   | OP311815    | <i>Ogyris iphis iphis</i>                  | NUOE284986          | Herberton, Qld                        |
| OP311784   | OP311816    | <i>Ogyris iphis iphis</i>                  | NUOE284995          | Herberton, Qld                        |
| OP311785   | OP311817    | <i>Ogyris iphis iphis</i>                  | NUOE285055          | Herberton, Qld                        |
| OP311786   | OP311818    | <i>Ogyris iphis iphis</i>                  | NUOE285064          | Herberton, Qld                        |
| -          | OP311819    | <i>Ogyris iphis iphis</i>                  | NUOE297591          | 16 km W Paluma, Qld                   |
| OP311787   | -           | <i>Ogyris iphis iphis</i>                  | NUOE297388          | 16 km W Paluma, Qld                   |
| OP311788   | OP311820    | <i>Ogyris iphis iphis</i>                  | NUOE297607          | 16 km W Paluma, Qld                   |
| -          | OP311821    | <i>Ogyris caelestia</i>                    | NUOE288733          | Carnarvon Station, Qld                |
| OP311789   | OP311822    | <i>Ogyris caelestia</i>                    | NUOE288760          | Carnarvon Station, Qld                |
| OP311790   | OP311823    | <i>Ogyris caelestia</i>                    | NUOE288788          | Carnarvon Station, Qld                |
| OP311791   | OP311824    | <i>Ogyris caelestia</i>                    | NUOE288830          | 8 km ENE Leyburn, Qld                 |
| OP311792   | OP311825    | <i>Ogyris caelestia</i>                    | NUOE289246          | Carnarvon Station, Qld                |

| <i>COI</i> | <i>cytb</i> | <b>Taxon</b>            | <b>Voucher code</b> | <b>Site (general locality, state)</b> |
|------------|-------------|-------------------------|---------------------|---------------------------------------|
| OP311793   | OP311826    | <i>Ogyris caelestia</i> | NUOE289255          | 8 km ENE Leyburn, Qld                 |

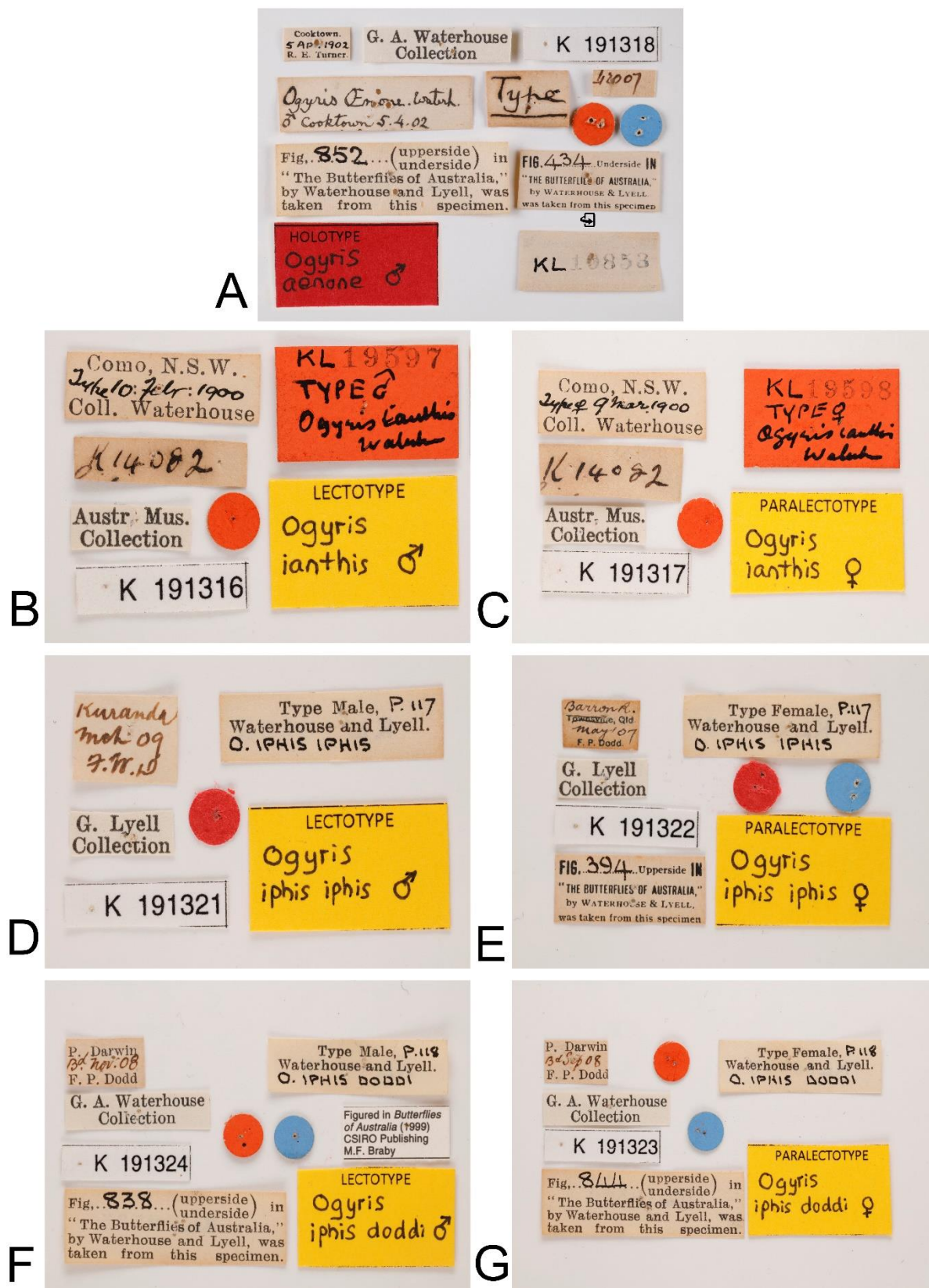
**Table S2.** GenBank Accession numbers and general locality information for additional specimens obtained through NCBI.

| <i>COI</i> | <i>cytb</i> | <b>Taxon</b>            | <b>Voucher code</b> | <b>Site (general locality, state)</b> |
|------------|-------------|-------------------------|---------------------|---------------------------------------|
| EF116946   | EF108424    | <i>Ogyris amaryllis</i> | Wn8                 | Wandoan, Qld                          |
| KF391690   | -           | <i>Ogyris iphis</i>     | 11ANIC-05879        | 15 km W of Paluma, Qld                |
| KF392745   | -           | <i>Ogyris iphis</i>     | 11ANIC-05878        | Brumby Gully, W Kuranda, Qld          |
| KF394552   | -           | <i>Ogyris ianthis</i>   | 11ANIC-05876        | Kuringai Chase NP, NSW                |
| KF516705   | KF516747    | <i>Ogyris idmo</i>      | RF64                | Perth, WA                             |
| KF516722   | KF516761    | <i>Ogyris genoveva</i>  | gAx1                | Mt Alexina, Vic                       |
| KF516724   | KF516763    | <i>Ogyris olane</i>     | ol2                 | Armidale, NSW                         |
| KF516725   | KF516764    | <i>Ogyris abrota</i>    | aCn1                | Crows Nest, Qld                       |

**Table S3.** Genitalia dissection data for specimens examined in this study.

| Identifier | Genus         | Species          | Sex | Data                                                                                                                                                                                                                         | Status   |
|------------|---------------|------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| EPB-161    | <i>Ogyris</i> | <i>aenone</i>    | M   | 17 km SE Cardwell, QLD, emg. 23 APR. 2021, MF Braby & EP Beaver / reared from larva on <i>Diplatia furcata</i> , coll. 2 MAR 2021, pup. 5 APR 2021 / NUOE284852                                                              | Non-type |
| EPB-162    | <i>Ogyris</i> | <i>iphis</i>     | M   | Palmer River, 22 Nov 1988, L. Ring / ANIC Database No. 31 023394                                                                                                                                                             | Non-type |
| EPB-163    | <i>Ogyris</i> | <i>iphis</i>     | M   | Burra Ra. Q, 1 Oct 1974, A. Atkins / ANIC Database No. 31 023403                                                                                                                                                             | Non-type |
| EPB-164    | <i>Ogyris</i> | <i>iphis</i>     | M   | 16 km W of Paluma, QLD, 860 m, 16 Mar. 2021, MF Braby & EP Beaver / NUOE297704 ANIC DNA sample                                                                                                                               | Non-type |
| EPB-165    | <i>Ogyris</i> | <i>ianthis</i>   | M   | Gosford, NSW, 28 Jan 1989, R. Mayo / L.R. Ring collection / ANIC database no. 31 021529                                                                                                                                      | Non-type |
| EPB-166    | <i>Ogyris</i> | <i>ianthis</i>   | M   | Leyburn, Qld, 26 Jan 1991, L. Ring / ANIC database no 31 021531                                                                                                                                                              | Non-type |
| EPB-167    | <i>Ogyris</i> | <i>caelestia</i> | M   | 8 km ENE Leyburn, Qld, 410 m, 19 Feb 2021, MF Braby & EP Beaver / NUOE297865                                                                                                                                                 | Paratype |
| EPB-168    | <i>Ogyris</i> | <i>caelestia</i> | M   | Milmeran, Q, 25 Feb 1964, J. Macqueen / C.G.L. Gooding collection, donated to ANIC 1979 / ANIC database No. 31 023481                                                                                                        | Paratype |
| EPB-172    | <i>Ogyris</i> | <i>aenone</i>    | M   | Port Douglas, QLD, emg. 7 MAY 2022, EP Beaver & MF Braby / reared from larva on <i>Dendrophthoe glabrescens</i> coll. 17 MAR 2022 pup. 21 APR 2022 / NUOE289033 ANIC DNA sample                                              | Non-type |
| EPB-173    | <i>Ogyris</i> | <i>aenone</i>    | M   | Cardwell, Qld, 17 May 1967, JFR Kerr                                                                                                                                                                                         | Non-type |
| EPB-174    | <i>Ogyris</i> | <i>caelestia</i> | M   | H&J d'Apice, Leyburn, Q, Feb 4, 1972 / ANIC Database no. 31 034809                                                                                                                                                           | Paratype |
| EPB-175    | <i>Ogyris</i> | <i>ianthis</i>   | M   | E Wiggans Ck, Pilliga East SCA, NSW, 330m emg. 10 MAY 2022, EP Beaver & MF Braby / reared from larva on <i>Amyema miquelii</i> coll. 04 MAR 2022, pup. APR 2022 / NUOE288751 ANIC DNA sample                                 | Non-type |
| EPB-176    | <i>Ogyris</i> | <i>iphis</i>     | M   | Specimen Hill, Herberton, QLD, 1030m 7 MAR 2021 MF Braby & EP Beaver / NUOE297740 ANIC DNA Sample                                                                                                                            | Non-type |
| EPB-177    | <i>Ogyris</i> | <i>aenone</i>    | F   | 17 km SE Cardwell, QLD, emg. 24 APR. 2022, EP Beaver & MF Braby / reared from larva on <i>Diplatia furcata</i> , coll. 16 MAR 2022, pup. 7 APR 2022 / NUOE297421 ANIC DNA Sample                                             | Non-type |
| EPB-178    | <i>Ogyris</i> | <i>caelestia</i> | F   | 8 km ENE Leyburn, Qld, 410 m, 7 APR. 2022, EP Beaver & MF Braby / NUOE289264 ANIC DNA sample                                                                                                                                 | Paratype |
| EPB-179    | <i>Ogyris</i> | <i>ianthis</i>   | F   | Frenches Forest, NSW, 'e.p.' Feb 1971, D.P. Sands / J.F.P. Kerr Collection                                                                                                                                                   | Non-type |
| EPB-180    | <i>Ogyris</i> | <i>iphis</i>     | F   | 10 mls W Paluma, Qld, March 1970 J.F.R. Kerr                                                                                                                                                                                 | Non-type |
| EPB-181    | <i>Ogyris</i> | <i>ianthis</i>   | M   | Yuleba SF, Roma-Condamine Rd, Qld., emg. 23-29 DEC. 2013, J. Armstrong / Reared from pupa on <i>Angophora leiocarpa</i> with <i>Amyema miquelii</i> coll. 13 Dec 2013 / M.F. Braby collection donated ANIC 2020 / NUOE296945 | Non-type |
| EPB-182    | <i>Ogyris</i> | <i>doddi</i>     | M   | Coborg Peninsula, NT, site CO84, emg. 15 SEP 2014 M.F. Braby / reared from larva on <i>Amyema sanguinea</i> coll. 8 Aug 2014 pup. 3 Sep 2014 // MFB-13-p037 / MF Braby collection donated ANIC 2020 / NUOE288885             | Non-type |
| MFB-124    | <i>Ogyris</i> | <i>aenone</i>    | M   | Meringa, 19 11 27, A.N.B / Genitalia No. MFB-124 / ANIC Database no. 31 023415                                                                                                                                               | Non-type |
| MFB-130    | <i>Ogyris</i> | <i>aenone</i>    | F   | Cardwell, NQ, 15 May 1977, D. Sands / Genitalia No. MFB-130 / ANIC Database no. 31 023503                                                                                                                                    | Non-type |

All specimens are housed in the ANIC.



**Figure S1.** Labels of type specimens in the *Ogyris aenone* species-group (see Fig. 3): A, holotype male of *O. aenone*; B–C, lectotype male and paralectotype female of *O. ianthis*; D–E, lectotype male and paralectotype female of *O. iphis iphis*; F–G, lectotype male and paralectotype female of *O. iphis doddi*.