Table S3. Generalized species distribution of dung beetle genera recorded from Australia including species count for the mesic and non-mesic zones as well as from New Guinea. *Aptenocanthon* is paraphyletic, counts for *Aptenocanthon* in part (#) known to be distantly related are excluded from \**Aptenocanthon.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Described spp. | Undescribed spp. | Mesic zone | Arid /monsoonal zones | shared | New Guinea |
| *Amphistomus* | 18 | 8 | 22 | 2 | 2 | 7 |
| *Aptenocanthon\** | 6 | 0 | 5 | 1 | 0 | 0 |
| *Aulacopris* | 3 | 0 | 3 | 0 | 0 | 0 |
| *Boletoscapter* | 2 | 0 | 2 | 0 | 0 | 0 |
| *Canthonosoma* | 3 | 1 | 4 | 0 | 0 | 0 |
| *Cephalodesmius* | 4 | ? | 4 | 0 | 0 | 0 |
| *Coproecus* | 1 | 1 | 0 | 2 | 0 | 0 |
| *Coptodactyla* | 14 | 0 | 10 | 2 | 2 | Yes (4) |
| *Demarziella* | 14 | 2 | 9 | 2 | 5 | 0 |
| *Diorygopyx* | 8 | 0 | 8 | 0 | 0 | 0 |
| *Labroma* | 3 | 0 | 3 | 0 | 0 | 0 |
| *Lepanus* | 21 | 55 | 64 | 8 | 3 | 7 |
| *Monteithocanthon* | 2 | 4 | 6 | 0 | 0 | 0 |
| *Aptenocanthon* in part # | 2 | 0 | 2 | 2 | 0 | 0 |
| *Matthewsius* |  |  |  |  |  |  |
| *Mentophilus* | 2 | 0 | 0 | 2 | 0 | 0 |
| *Monoplistes* | 6 | 2 | 4 | 1 | 3 | 0 |
| *Pseudignambia* | 2 | 18 | 18 | 0 | 0 | 0 |
| *Sauvagesinella* | 3 | 0 | 3 | 0 | 0 | 0 |
| *Temnoplectron* | 16 | 0 | 11 | 0 | 5 | 5 |
| *Tesserodon* | 13 | 2 | 4 | 2 | 3 | 5 |
| *Thyregis* | 4 | 1 | 5 | 0 | 0 | 0 |
| Tribe Onthophagini |  |  |  |  |  |  |
| *Onthophagus* | 198 | 36 |  |  |  | 115 |
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