**S3 Table.** Revised taxonomic system of sections of the genus *Volvox*.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Section | *Volvox* | *Merrillosphaera* (Shaw) Printz | *Besseyosphaera*(Shaw) Printz | *Janetosphaera* (Shaw) Printz |
| Synonymous section |  | *Copelandosphaera* (Shaw) Printz*Campbellosphaera* (Shaw) Printz |  |  |
| Species included based on morphological and molecular data | *V. globator* (type species of *Volvox*) *V. capensis* *V. barberi* *V. rousseletii**V. kirkiorum* *V. ferrisii*  | *V. carteri* (type species of *Merrillosphaera*)*V. obversus* (type species of *Campbellosphaera*)*V. tertius**V. spermatosphaera**V. ovalis**V. africanus**V. reticuliferus**V. dissipatrix* (type species of *Copelandosphaera*) | *V. powersii* (type species of *Besseyosphaera*)*V. gigas* | *V. aureus* (type species of *Janetosphaera*) |
| Species included based on only morphological data | *V. merrilli**V. perglobator**V. amboensis**V. prolificus* |  |  | *V. pocockiae* |
| Reference | [1-3] | [1, 4, 5]The present study | [1, 6]The present study | [1, 6, 7] |

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