**Table S2** Summary of karyotype data of caryophyllidean tapeworms

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ORDER** | **Chromosome****number 2n [3n]** | **Morphology** | **TCL\* (µm)** | **Absolute length (µm)** | **References** | **Haploid number of rDNA clusters** |
| **Family** |  |  |  |  |  |  |
| **CARYOPHYLLIDEA** |  |  |  |  |  |  |
| **Balanotaeniidae** |  |  |  |  |  |  |
| *Balanotaenia bancrofti* | 14 |  |  |  | Grey (1979) |  |
| *Caryoaustralus sprenti* | 6 | 3m | 15.0 |  | Grey (1979) |  |
| *Notolytocestus minor* | 12 | 6a | 17.0 | 1.7 - 4.2 | Grey (1979) |  |
| **Capingentidae** |  |  |  |  |  |  |
| *Glaridacris catostomi* | 20 [30] | 8m+2sm | 55.7 | 3.2 - 7.6 | Grey and Mackiewicz (1980) |  |
| *Glaridacris vogei* | 20 | 8m + 1sm + 1a | 60.5 | 2.3 - 8.5 | Grey (1979) |  |
| *Promonobothrium hunteri* | 20 | 9m + 1a | 61.2 | 2.1 - 8.9 | Grey (1979) |  |
| *Hunterella nodulosa* | 14 | 3m+1sm+3a |  | 2.5 - 8.0 | Mackiewicz and Jones (1969) |  |
|  | 14 | 3m+4a | 56.6 | 1.9 - 7.0 | Grey (1979) |  |
| *Biacetabulum bilboculoides* | 20 |  |  |  | Grey (1979) |  |
| *Archigetes* sp. (=*appendiculatus*) | 18 |  |  | < 4 | Motomura (1929) |  |
| *Archigetes sieboldi* | 20 |  |  |  | Špakulová et al (2011) |  |
| *Isoglaridacris folius* | 18 | 1m + 8a | 24.1 | 1.5 - 3.8 | Grey (1979) |  |
| *Isoglaridacris jonesi* | 18 | 2m + 7a | 25.9 | 1.7 - 4.3 | Grey (1979) |  |
| *Isoglaridacris bulbocirrus* | 18 [27] |  |  |  | Grey (1979) |  |
| *Pseudoglaridacris laruei* | 16 | 3m+1sm+4a | 37.7 | 2.0 - 8.6 | Grey and Mackiewicz (1974) |  |
| *Pseudoglaridacris confusa* | 16 |  |  |  | Grey (1979) |  |
| **Caryophyllaeidae** |  |  |  |  |  |  |
| *Caryophyllaeides fennica* | 20 | 10m | 58.65 | 2.8 - 8.19 | Orosová et al. (2010b) | 2 |
| *Paracaryophyllaeus gotoi* | 20 | 10m |  |  | present paper | 1 |
| *Caryophyllaeus laticeps* | 20 [30] | 10m | 87.8 | 3.0 - 12.9 | Petkevičiūtė and Kuperman (1992) |  |
|  | 20 | 10m | 80.6 | 2.82 - 11.95 | Bombarová et al. (2015) |  |
|  | 20 | 10m | 91.8 | 4 - 12.87 | present paper | 1 |
| *Atractolytocestus huronensis* | [24] | 4m+3a+1minute | 24.9 | 0.8 - 7.2 | Jones and Mackiewicz (1969) |  |
|  | [24] | 4m+3a+1minute | 37.0 | 0.9 - 9.6 | Kráľová-Hromadová et al. (2010) | 2 |
|  | [24] | 4m+3a+1minute | 37.0 | 0.8 - 13.9 | Špakulová et al. (2019) | 2 |
| *Khawia sinensis* | 16 | 3m+5a | 59.3 | 5.2 - 10.8 | Petkevičiūtė (1998) |  |
|  | 16 | 3m+5a | 41.23 | 3.8 - 6.8 | Mutafova and Nedeva (1999) |  |
|  | 16 | 3m+5a | 42.54 | 3.66 - 7.15 | Orosová and Oros (2012) | 1 |
| *Khawia saurogobii* | 16 | 3m+5a | 56.3 | 3.9 - 10.0 | Orosová et al. (2010a) | 1 |
| *Khawia iowensis* | 16 | 5m+3a | 35.5 | 3.1 - 6.1 | Grey (1979) |  |
| *Khawia abbottinae* | 16 | 5m+3a | 56,8 | 4.6 - 10.2 | Orosová et al. (2019) | 1 |
| *Khawia rossittensis* | 16 |  |  |  | Grey (1979) |  |
| **Lytocestidae** |  |  |  |  |  |  |
| *Lytocestus indicus* | 16 |  |  |  | Vijayaraghavan and Subramanyam (1977) |  |