Supplement Table 1. Age-length data, reproduction strategy and the information of age determination used in the present study

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **Scientific name** | **Sample** |  | **Data** | | **R** | **Precision** | **Verification** | **Ageing** | **References** |
| **No.** | **Size** | **Sex** | **source** | **Length** |
| 1 | *Amblyraja radiata* | 224 | C | a | TL | o | CV | MIR | Ver | Sulikowski et al., 2005\* |
| 2 | *Carcharhinus acronotus* | 277 | C | a | TL | v | IAPE | MIR | Ver | Barreto et al. 2011\* |
| 3 | *C. brevipinna* | 141 | F | a | FL | v | IAPE | MIR | Ver | Carlson and Baremore, 2005 |
|  |  | 117 | M |  |  |  |  |  |  |  |
| 4 | *C. falciformis* | 289 | C | a | PCL | v | - | MIR | Ver | Oshitani et al., 2003 |
| 5 | *C. isodon* | 240 | C | a | TL | v | - | MIR | Ver | Carlson et al., 2003 |
| 6 | *C. leucas* | 117 | C | a | PCL | v | IAPE | MIR | Ver | Wintner et al., 2002 |
| 7 | *C. longimanus* | 107 | C | a | TL | v | IAPE | MIR | Ver | Lessa et al., 1999 |
| 8 | *C. plumbeus* | 186 | C | a | PCL | v | IAPE | MIR | Ver | Romine et al., 2006 |
| 9 | *C. porosus* | 504 | C | a | TL | v | IAPE | MIR | Ver | Lessa and Santana, 1998 |
| 10 | *Dasyatis pastinaca* | 49 | C | a | TL | ov | IAPE | MIR | Ver | Ismen, 2003 |
| 11 | *Dipturus chilensis* | 400 | C | a | TL | o | IAPE | MIR | Ver | Licandeo et al., 2006\* |
| 12 | *Etmopterus pusillus* | 224 | F | a | TL | ov | IAPE, CV | MIR | Sp | Coelho and Erzini, 2007 |
|  |  | 299 | M |  |  |  |  |  |  |  |
| 13 | *Etmopterus spinax* | 733 | C | a | TL | ov | IAPE, CV | MIR | Sp | Coelho and Erzini, 2008 |
| 14 | *Galeocerdo cuvier* | 90 | C | a | PCL | v | IAPE | MIR | Ver | Wintner and Dudley, 2000\* |
| 15 | *Isogomphodon oxyrhynchus* | 105 | C | a | TL | ov | IAPE | MIR | Ver | Lessa et al., 2000\* |
| 16 | *Leucoraja ocellata* | 209 | C | a | TL | o | IAPE | MIR | Ver | Sulikowski et al., 2003 |
| 17 | *Odontaspis taurus* | 52 | C | a | TL | v | - | MIR | Ver | Branstetter and Mustck, 1994 |
| 18 | *Rostroraja texana* | 132 | F | a | TL | o | IAPE | MIR | Ver | Sulikowski et al., 2007\* |
|  |  | 99 | M |  |  |  |  |  |  |  |
| 19 | *Rhizoprionodon terraenovae* | 804 | C | a | PCL | v | IAPE | MIR | Ver | Loefer and Sedberry, 2003 |
| 20 | *Sphyrna lewini* | 307 | C | a | FL | v | IAPE | MIR | Ver | Piercy et al., 2007 |
| 21 | *Mustelus griseus* | 207 | C | a | TL | v | IAPE | MIR | Ver | Wang and Chen, 1982\* |
| 22 | *Carcharhinus limbatus* | 92 | C | a | PCL | v | IAPE | MIR | Ver | Wintner and Cliff, 1996 |
| 23 | *Rhinobatos rhinobatos* | 80 | C | a | TL | o | IAPE | MIR | Ver | Ismen et al., 2007 |
| 24 | *Galeorhinus galeus* | 395 | C | b | TL | ov | IAPE | MIR | Ver | Moulton et al.,1992\* |
| 25 | *M. antarcticus* | 752 | F | b | TL | ov | IAPE | MIR | Ver | Moulton et al.,1992\* |
|  |  | 516 | M |  |  |  |  |  |  |  |
| 26 | *Dipturus batis* | 81 | C | b | TL | o | IAPE | MIR | Ver | Du Buit, 1977\* |
| 27 | *Leucoraja naevus* | 48 | C | b | TL | o | IAPE | MIR | Ver | Du Buit, 1977 |
| 28 | *L. erinacea* | 777 | C | b | TL | o | IAPE | MIR | Ver | Waring, 1984\* |
| 29 | *Raja undulata* | 182 | C | b | TL | o | - | MIR | Ver | Coelho and Erzini, 2002 |
| 30 | *Carcharhinus signatus* | 317 | C | b | TL | v | IAPE | MIR | Ver | Santana and Lessa, 2004\* |
| 31 | *Alopias pelagicus* | 269 | C | c | PCL | v | - | MIR | Ver | Liu et al., 1999\* |
| 32 | *Dipturus kwangtungensis* | 113 | F | c | TL | o | - | MIR | Ver | Joung et al., 2016\* |
|  |  | 111 | M |  |  |  |  |  |  |  |
| 33 | *Prionace glauca* | 431 | C | c | TL | v | IAPE | MIR | Ver | Huang, 2006\* |
| 34 | *Okamejei acutispina* | 173 | F | c | DW | o | - | MIR | Ver | Joung et al., 2011 |
|  |  | 160 | M |  |  |  |  |  |  |  |
| 35 | *Chiloscyllium plagiosum* | 429 | C | c | TL | o | IAPE, PA | MIR | Ver | Chen et al., 2007 |
| 36 | *Carcharhinus obscurus* | 387 | C | c | TL | v | - | MIR | Ver | Joung et al., 2015 |
| 37 | *Isurus oxyrinchus* | 130 | F | c | FL | ov | IAPE | EA | Ver | Liu et al., 2018 |
| 38 | *Rhincodon typus* | 84 | C | c | TL | ov | - | MIR | Ver | Hsu, 2009 |

“F” : female, “M” : male, “C” : both sexes combined, “a” : sample simulation, “b” : age-length-key, “c” : original data, “Ver” : vertebrae, “Sp” : spines, \* : no L0, “R” : reproduction strategy, “o” : oviparity, “v” : viviparity, “ov” : aplacental viviparity, “CV” : coefficient of variation, “PA” : percent agreement, “IAPE” : index of average percentage error, “MIR” : marginal increment ratio analysis, “EA” edge analysis.