**Table S2.** List of newly designed species-specific primer pairs with description of its primer length, product size, GC content (%) and melting temperature (°C). The successfully amplified primer pairs are marked as ‘√’

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Targeted species  | Primer name | Primer sequence (5’-3’) | Primer length (bp) | Product size (bp) | GC content (%) | Melting temperature (°C) | Successfully amplified primer pairs |
| 1. | *Euthynnus affinis* | P1\_pF1 | TTGGGGACGACCAGATCTAC | 20 | 502 | 55 | 53.8 |  |
| P1\_pR1 | AGGTTTCGGTCTGTCAGGAG | 20 | 55 | 53.8 |
| 2. | *Auxis thazard*  | P2\_F1 | GAGCTGGTATAGTTGGCACAGC | 22 | 621 | 55 | 56.7 | √ |
| P2\_R1 | GGTAAAGAATTGGGTCTCCCCC | 22 | 55 | 56.7 |
| 3. | *Mystus cavasius*  | P4\_pF3 | ACCTTGTATTCGGTGCCTG | 19 | 552 | 52.63 | 57.45 | √ |
| P4\_pR2 | CCAGAACTGGGAGGGAAAG | 19 | 57.89 | 57.03 |
| 4. | *Mystus vittatus* | P5\_F2 | TGCCTGAGCCGGAATAGTTG | 20 | 599 | 55 | 60.11 | √ |
| P5\_R2 | CAGGATCGAAGAAGGTGGTG | 20 | 55 | 57.89 |
| 5. | *Pennahia pawak*  | P6\_pF2 | ATCCGAGCGGAACTAAGTC | 19 | 558 | 52.63 | 56.66 | √ |
| P6\_pR2 | CGGGTCAAAGAAGGTTGTG | 19 | 52.63 | 56.46 |
| 6. | *Decapterus macarellus*  | P7\_F1 | TGCCTGAGCTGGAATGGTAG | 20 | 558 | 50 | 56.12 | √ |
| P7\_R1 | AGCATTGTAATGCCAGCAGC | 20 | 55 | 59.4 |
| 7. | *Selaroides leptolepis*  | P8\_F1 | TATTTGGTGCTTGAGCCGG | 19 | 502 | 52.63 | 58.13 |  |
| P8\_R1 | ACGGCCCATACGAATAGTG | 19 | 52.63 | 57.02 |
| 8. | *Atule mate*  | P9\_F1 | GCTTACTCATCCGAGCAG | 18 | 525 | 55.56 | 54.95 |  |
| P9\_R1 | GCATTGTAATTCCAGCGG | 18 | 50 | 54.25 |
| 9. | *Mastacembelus erythrotaenia*  | P10\_F1 | GTCACAGCACATGCTTTCG | 20 | 520 | 50 | 59.41 | √ |
| P10\_R1 | ATAGGATTGGGTCTCCGCC | 20 | 55 | 60.10 |
| 10. | *Macrognathus aculeatus* | P11\_pF1 | TGGCATAACGAGGGCTTAAC | 20 | 256 | 50 | 60.1 |  |
| P11\_pR1 | TTTAGAGCGGTGGCTCTTGT | 20 | 50 | 60 |
| 11. | *Alepes kleinii*  | P12\_pF3 | AGCCGGAATAGTAGGGACAG | 20 | 534 | 55 | 58.29 | √ |
| P12\_pR3 | GCTAAAACCGGAAGGGATAG | 20 | 50 | 55.61 |
| 12. | *Caranx tille*  | P14\_pF3 | GGCCCATGCCTTTGTAATAA | 20 | 293 | 45 | 59.8 | √ |
| P14\_pR3 | ATGAGACCCCTGCTAGGTGA | 20 | 55 | 59.7 |
| 13. | *Liza placeniceps*  | P16\_pF3 | GGGTGACCAAGGAGCATAAA | 20 | 235 | 50 | 59.9 |  |
| P16\_pR3 | AATAGCGGCTGCACCATTAG | 20 | 50 | 60.3 |
| 14. | *Oreochromis aureus*  | P17\_pF2 | GCCTTCTGTCGACTTAACCATC | 22 | 235 | 50 | 60.1 | √ |
| P17\_pR2 | GGTTGTGTTTAGGTTTCGGTCT | 22 | 45.5 | 59.4 |
| 15. | *Ephippus orbis*  | P18\_F1 | GAGCCTGAGCTGGAATAG | 18 | 628 | 55.56 | 54.13 |  |
| P18\_R1 | TGGTAGAGGATTGGATCC | 18 | 50 | 52.05 |