**Table S1. List of 48 specimens of *Stolephorus* examined along with the corresponding GenBank and BOLD accession numbers for the cytochrome oxidase I (COI) gene.** Three specimens were newly sequenced for this study (their sequence numbers are highlighted in bold). Other sequences were mined from GenBank or BOLD. Abbreviations: COI, cytochrome oxidase I gene; n/a, not available.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Sample identifier** | **Museum registration** | **Sampling locality** | **GenBank COI accession no.** | **BOLD accession no.** | **Reference** |
| ***Stolephorus meteorum* sp. nov.** | KAU14-0575 | SMF 35899 (**Holotype**) | Jizan, Saudi Arabia, Red Sea | **ON668415** | **STO001-22** | present study |
|  | KAU12-0682 | SMF 34979 (**Paratype**) | Jizan, Saudi Arabia, Red Sea | **ON668414** | **STO002-22** | present study |
|  | KAU13-0662 | SMF 35369 (**Paratype**) | Jizan, Saudi Arabia, Red Sea | **ON668413** | **STO003-22** | present study |
| *Stolephorus indicus* (van Hasselt, 1823) | n/a | KAUM–I. 59676 | off Phuket, Thailand | MH380519 | n/a | Hata et al. 2021 |
| n/a | CIFEFGB-SI-063 | Kerala, India | KX768911 | ANGBF34981-19 | Gangan et al. 2019 |
| n/a | CIFEFGB-SI-062 | Kerala, India | KX768910 | ANGBF34980-19 | Gangan et al. 2019 |
| n/a | KAUM–I. 59677 | off Phuket, Thailand | MH380520 | n/a | Hata et al. 2021 |
|  | IK038 | USMFC (82) 00019 | Cecil fish market, Penang, Malaysia | MT080412 | n/a | Hata et al. 2021 |
|  | IK039 | USMFC (82) 00019 | Cecil fish market, Penang, Malaysia | MT080413 | n/a | Hata et al. 2021 |
|  | Ra12 | n/a | Ranong, Thailand | MH380531 | n/a | Hata et al. 2021 |
|  | Ra67 | n/a | Ranong, Thailand | MH380532 | n/a | Hata et al. 2021 |
|  | Ra73 | NTUM 12322 | Ranong, Thailand | MH380533 | n/a | Hata et al. 2021 |
|  | Ra74 | NTUM 12322 | Ranong, Thailand | MH380534 | n/a | Hata et al. 2021 |
|  | Ra75 | n/a | Ranong, Thailand | MH380535 | n/a | Hata et al. 2021 |
|  | SRI61 | n/a | Negombo fish market, Sri Lanka | MH380540 | n/a | Hata et al. 2021 |
|  | SRI62 | n/a | Negombo fish market, Sri Lanka | MH380541 | n/a | Hata et al. 2021 |
|  | SRI63 | n/a | Negombo fish market, Sri Lanka | MH380542 | n/a | Hata et al. 2021 |
|  | SRI68 | n/a | Negombo fish market, Sri Lanka | MH380543 | n/a | Hata et al. 2021 |
|  | SRI69 | n/a | Negombo fish market, Sri Lanka | MH380544 | n/a | Hata et al. 2021 |
|  | n/a | StIn-IBRC | Gulf of Oman (25.39N 57.49E), Iran | KU935459 | n/a | Afrand et al. 2020 |
| *Stolephorus balinensis* (Bleeker, 1849) | n/a | KAUM–I. 56078 | off Ilolo, Panay Island, Philippines | MH380545 | n/a | Hata et al. 2021 |
| n/a | KAUM–I. 62917 | off Ilolo, Panay Island, Philippines | MH380546 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 63033 | off Oton, Panay Island, the Philippines | MH380547 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 63034 | off Oton, Panay Island, the Philippines | MH380548 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 98413 | off Ilolo, Panay Island, Philippines | MH380549 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 105273 | off Bidong Island, Kuala Terengganu, Malaysia | MH380550 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 105274 | off Bidong Island, Kuala Terengganu, Malaysia | MH380551 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 105275 | off Bidong Island, Kuala Terengganu, Malaysia | MH380552 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 105276 | off Bidong Island, Kuala Terengganu, Malaysia | MH380553 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 106300 | Ho Chí Minh, Vietnam | MH380554 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 106301 | Ho Chí Minh, Vietnam | MH380555 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 106302 | Ho Chí Minh, Vietnam | MH380556 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 106303 | Ho Chí Minh, Vietnam | MH380557 | n/a | Hata et al. 2021 |
|  | n/a | KAUM–I. 106304 | Ho Chí Minh, Vietnam | MH380558 | n/a | Hata et al. 2021 |
|  | HH55 | NMMBP-25504 | Donggang, Pingtung, Taiwan | MH380727 | n/a | Hata et al. 2021 |
|  | HH56 | NMMBP-25504 | Donggang, Pingtung, Taiwan | MH380728 | n/a | Hata et al. 2021 |
|  | HH57 | NMMBP-25504 | Donggang, Pingtung, Taiwan | MH380559 | n/a | Hata et al. 2021 |
|  | TA23 | NTUM 12319 | Donggang, Pingtung, Taiwan | MH380561 | n/a | Hata et al. 2021 |
|  | TA24 | NTUM 12319 | Donggang, Pingtung, Taiwan | MH380562 | n/a | Hata et al. 2021 |
|  | SL\_P221 | USMFC (82) 00054 | Kota Bharu fish market, Malaysia | MH380643 | n/a | Hata et al. 2021 |
|  | SL\_P222 | USMFC (82) 00054 | Kota Bharu fish market, Malaysia | MH380644 | n/a | Hata et al. 2021 |
|  | Bk06 | n/a | Mahachai fish market, Bangkok, Thailand | MH380570 | n/a | Hata et al. 2021 |
| *Stolephorus belaerius* Hata, Lavoué and Motomura, 2021 | Smith 55.3#1 | n/a | Mhlathuze estuary, South Africa | JF494602 | TZMSC271-05 | Steinke et al. 2016 |
|  | ADC12\_55.3#7 | n/a | Mhlathuze estuary, South Africa | KF489773 | DSFSG838-12 | Steinke et al. 2016 |
|  | ADC12\_55.3#8 | n/a | Mhlathuze estuary, South Africa | KF489772 | DSFSG848-12 | Steinke et al. 2016 |
|  | ADC10\_55.3#4 | n/a | Mhlathuze estuary, South Africa | HQ945937 | DSFSG357-10 | Steinke et al. 2016 |
|  | ADC10\_55.3#5 | n/a | Mhlathuze estuary, South Africa | HQ945953 | DSFSG374-10 | Steinke et al. 2016 |
|  | S0069\_002 | n/a | Madagascar | OL409503 | IFBIO1193-18 | Jaonalison et al. 2022 |