**Table S2.** The relative species abundances among sites

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Family name | Species name | Youngan | Yongxing | Baosheng | Datan G2 | Datan G1 | Baiyu |
| Camptandriidae | *Baruna sinensis* |  | \*\* | \*\* |  |  |  |
| Dotillidae | *Ilyoplax tansuiensis* |  | \*\*\* |  |  |  |  |
|  | *Scopimera bitympana* | \*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* |
|  | *Scopimera intermedia* |  | \*\* | \*\* |  | \*\*\* | \* |
|  | *Tmethypocoelis ceratophora* |  | \*\*\* |  |  |  |  |
| Eriphiidae | *Eriphia ferox*+ | \*\*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* |
|  | *Eriphia sebana*+ |  |  |  | \* |  |  |
| Gecarcinidae | *Cardisoma carnifex* |  | \* | \* |  |  |  |
| Grapsidae | *Grapsus albolineatus* | \*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* |  |
|  | *Metopograpsus thukuhar*+ | \* | \*\*\* | \*\* | \*\*\* | \*\* | \* |
| Macrophthalmidae | *Chaenostoma orientale*+ | \*\* | \*\* | \*\* | \*\*\* | \*\* | \* |
|  | *Macrophthalmus banzai* |  | \*\*\* | \*\* |  |  |  |
| Matutidae | *Matuta victor* |  |  |  | \* | \* |  |
|  | *Mictyris brevidactylus* | \*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* |
| Ocypodidae | *Austruca lactea* |  | \*\*\* | \*\*\* |  |  | \*\*\* |
|  | *Austruca triangularis* |  | \* |  |  |  |  |
|  | *Gelasimus borealis* |  | \*\* | \*\* |  |  |  |
|  | *Ocypode ceratophthalmus* |  | \*\* | \*\* | \*\* | \* | \* |
|  | *Ocypode sinensis* | \* |  | \* | \*\*\* | \*\* | \*\* |
|  | *Ocypode stimpsoni* |  | \*\* | \*\* | \*\*\* | \*\*\* | \* |
|  | *Paraleptuca crassipes* |  |  | \* |  |  |  |
|  | *Tubuca arcuata* | \* | \*\*\* | \*\*\* |  |  | \*\* |
| Oziidae | *Epixanthus frontalis*+ |  |  |  | \* |  |  |
|  | *Ozius rugulosus*+ |  |  |  | \*\* | \* |  |
| Portunidae | *Carupa tenuipes*+ | \* |  |  | \* |  |  |
| Portunidae | *Charybdis annulata*+ | \*\* | \*\* | \* | \*\*\* | \*\* | \*\* |
|  | *Charybdis feriatus*+ | \* |  |  | \* |  | \* |
|  | *Charybdis lucifera* | \* |  |  | \* | \* |  |
|  | *Charybdis orientalis*+ |  |  |  | \* | \* |  |
|  | *Portunus sanguinolentus*+ |  |  |  | \* | \* |  |
|  | *Scylla paramamosain* |  |  |  | \* |  |  |
|  | *Thranita crenata*+ | \*\* | \* | \* | \*\* | \*\* | \* |
|  | *Thranita danae*+ | \*\*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* | \*\*\* |
| Sesarmidae | *Chiromantes haematocheir* | \*\* | \*\* | \*\* | \*\* | \*\* | \*\*\* |
|  | *Nanosesarma minutum*+ | \*\*\* | \*\* | \*\* | \*\*\* | \*\* | \*\* |
|  | *Orisarma dehaani* | \*\* | \*\* |  | \*\* |  | \*\* |
|  | *Parasesarma bidens* |  | \*\*\* | \*\* |  |  | \*\* |
|  | *Parasesarma pictum* | \*\* | \*\*\* | \*\* | \*\* | \*\* | \*\* |
|  | *Parasesarma tripectinis* |  | \*\* | \*\* |  |  |  |
| Varunidae | *Chasmagnathus convexus* | \* | \*\* | \* |  |  | \* |
|  | *Eriocheir japonica* |  | \* |  | \*\* |  | \* |
|  | *Gaetice depressus*+ | \*\* | \*\* | \*\* | \* | \* | \* |
|  | *Helicana doerjesi* |  | \*\* |  |  |  |  |
|  | *Helice formosensis* | \*\* | \*\* | \* | \* | \* | \*\*\* |
|  | *Hemigrapsus penicillatus* |  | \*\* | \* |  |  |  |
|  | *Hemigrapsus sanguineus* |  | \* |  | \* |  | \* |
|  | *Metaplax elegans* |  | \*\* | \* |  |  |  |
|  | *Pseudohelice subquadrata* | \* | \*\*\* | \* |  |  | \*\* |
|  | *Varuna litterata* |  |  |  | \*\* |  |  |
| Xanthidae | *Atergatis integerrimus*+ |  |  |  | \* | \* |  |
|  | *Chlorodiella nigra*+ |  |  |  | \* |  |  |
|  | *Leptodius affinis*+ | \* |  |  | \*\* | \* |  |
| Number of species | | 23 | 36 | 31 | 34 | 25 | 26 |

Note: The star symbols represent the relative abundance of each species. \*: 1–10 individuals; \*\*: 11–100 individuals; \*\*\*: >100 individuals. The “+” symbols represent the species could be found in algal reef habitat.