**Appendix 1.** Sampling details of the nine *Caridina*/ *Neocaridina* species and *Macrobrachium* *hainanense*, and the associated analyses done. *N*: sample size. \*: analysis performed. If multiple analyses were performed, the portions of individuals included in each analysis were indicated by numbers in parentheses

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Species | Sampling localities (Hong Kong) | *N* | Microsatellite characterization | Microsatellite cross-species amplification | Phylogenetic analysis |
| *C. cantonensis* | Fung Wong Wat | 24 | \* |  |  |
|  | Kat Hing Bridge | 8 |  |  | \* |
|  | Clear Water Bay Second Beach | 1 |  |  | \* |
| *C. logemanni* | Site 1^ | 18 |  |  | \* |
|  | Site 2^ | 16 |  | \*(16) | \*(11) |
| *C. serrata* | Lung Fu Shan | 20 |  |  | \* |
|  | Pok Fu Lam Reservoir | 24 |  | \*(16) | \*(24) |
|  | Tong Fuk | 22 |  |  | \* |
|  | Shek Pik | 5 |  |  | \* |
|  | Chi Ma Wan | 4 |  |  | \* |
| *C. trifasciata* | Pai Tau Tun | 24 |  |  | \* |
|  | Tsak Yue Wu | 24 |  | \*(16) | \*(24) |
|  | Po Kwu Wan | 24 |  |  | \* |
|  | Sheung Yiu | 1 |  |  | \* |
| *C. longirostris* | Ham Tin | 14 |  |  | \* |
|  | Shui Lo Cho | 16 |  | \*(16) | \*(14) |
|  | Wang Tong Village | 13 |  |  | \* |
|  | Sha Lo Tung | 4 |  |  | \* |
|  | Pak Sha O | 3 |  |  | \* |
|  | Sai Wan | 3 |  |  | \* |
|  | Hau Tong Kai | 2 |  |  | \* |
|  | Kuk Po | 2 |  |  | \* |
| *C. lanceifrons* | Tan Shan River | 44 |  | \*(16) | \*(44) |
| *C. typus* | Fan Lau | 28 |  | \*(16) | \*(28) |
|  | Chi Ma Wan | 1 |  |  | \* |
|  | Sunshine Island | 1 |  |  | \* |
| *C. aff. apodosis* | Site 3^ | 9 |  | \*(8) | \*(9) |
| *N. palmata* | Little Hawaii Water Fall | 13 |  | \*(13) | \*(12) |
|  | Pok Fu Lam Reservoir | 3 |  | \*(3) | \*(3) |
| *M.* hainanense. | Pak Sha O | 5 |  |  | \* |
|  | Ta Tit Yan | 1 |  |  | \* |

^ These sampling sites are not disclosed because the species concerned are extremely rare and of high conservation value.