

Table 4. Maximum STX concentrations, microalgal sources, and geographical reports of STXs in crustaceans.

| Crustacean species and presumptive microalgal source | Common name | Maximum STX(s) concentration | Location | Reference |
|------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------|
| <i>Alexandrium catenella</i> | | | | |
| <i>Cancer magister</i> | Dungeness crab | 72 µg STX eq./100g viscera | Washington, USA | 85 |
| <i>Cancer productus</i> | Red rock crab | 285 µg STX eq./100g viscera | Washington, USA | 161 |
| | | 27 µg STX eq./100g muscle | | |
| <i>Fabia subquadrata</i> | Pea crab | 32 µg STX eq./100g whole crabs | Washington, USA | 85 |
| <i>Hemigrapsus nudus</i> | Purple shore crab | 44 µg STX eq./100g whole body | Washington, USA | 161 |
| | | minus legs and carapace | | |
| <i>Hemigrapsus oregonensis</i> | Green shore crab | 31 µg STX eq./100g whole | Washington, USA | 161 |
| <i>Pagurus</i> sp. | Hermit crab | 35 µg STX eq./100g whole crabs | Washington, USA | 85 |
| <i>Pugettia producta</i> | Northern kelp crab | 146 µg STX eq./100g eggs; | Washington, USA | 161 |
| | | 1710 µg STX eq./100g viscera; | | |
| | | 48 µg STX eq./100g muscle | | |
| <i>Balanus</i> spp. | Barnacles | 84 µg STX eq./100g whole | Washington, USA | 161 |
| <i>Alexandrium tamarense</i> | | | | |
| <i>Anonyx sarsi</i> | Gammarid amphipod | 180 µg STX eq./100g (tissue not specified) | St. Lawrence estuary, Canada | 162 |
| <i>Cancer borealis</i> | Jonah crab | 56 µg STX eq./100g (tissue not specified) | Maine, USA | 85 |
| <i>Homarus americanus</i> | American lobster | 1512 µg STX eq./100g hepatopancreas (bioassay); 961 µg STX eq./100g hepatopancreas (HPLC); 69 µg STX eq./100g meat (HPLC) | Bay of Gaspe, Canada | 162 |
| <i>Pyrodinium bahamense</i> | | | | |
| ND | Crab | 339 MU* 100 g ⁻¹ | Brunei Darussalam | 141 |

| | | | | |
|--------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------|---------|
| ND | Mangrove crabs | 239 MU 100 g ⁻¹ guts; 175 MU 100 g ⁻¹ gills | Sabah, Malaysia | 138 |
| <i>Portunus pelagicus</i> | Blue manna crab | 175 MU 100 g ⁻¹ whole crab; 288 MU 100 g ⁻¹ gills; 328 MU 100 g ⁻¹ guts | Sabah, Malaysia | 138 |
| | | 1.8 µg STX eq./100g whole | Northwest Australia | 147 |
| <i>Panulirus versicolor</i> | Painted spiny lobster | 175 MU 100 g ⁻¹ whole lobster; 175 MU 100 g ⁻¹ body only | Sabah, Malaysia | 138 |
| <i>Panulirus longipes</i> | Longlegged spiny lobster | 211 MU 100 g ⁻¹ whole lobster; 177 MU 100 g ⁻¹ head and legs | Sabah, Malaysia | 138 |
| ND | Penaeid shrimp | 175 MU 100 g ⁻¹ frozen tails; 268 MU 100 g ⁻¹ body only | Sabah, Malaysia | 138 |
| ND | Penaeid shrimp “Udang” | 190 MU 100 g ⁻¹ | Brunei Darussalam | 141 |
| Unknown origin | | | | |
| <i>Hemigrapsus sanguineus</i> | Asian shore crab | 0.16 MU g ⁻¹ hepatopancreas | Sanriku coast, Japan | 146 |
| <i>Metopograpsus frontalis</i> | Mangrove shore crab | 10.0 µg STX eq./100g whole | Northwest Australia | 147 |
| <i>Pachygrapsus crassipes</i> | Striped shore crab | 0.10 MU g ⁻¹ hepatopancreas | Sanriku coast, Japan | 146 |
| <i>Percnon planissimum</i> | Sally lightfoot crab | 7.4 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| <i>Pilumnus pulcher</i> | Hairy crab | 80 µg STX eq./100g whole | Northwest Australia | 147 |
| <i>Pilumnus vespertilio</i> | Hairy crab | 120 µg STX eq./100g whole | Northwest Australia | 147 |
| | | 6.1 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| <i>Schizophrys aspera</i> | Eyelash spider crab | 2.3 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| <i>Telmessus acutidens</i> | Edible shore crab | 2723 µg STX eq./100g viscera | Fukushima Prefecture, Japan | 163,164 |
| <i>Actaeodes tomentosus</i> | Xanthid crab | 130 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| <i>Atergatis floridus</i> | Xanthid crab | Positive STX, NEO, GTX2 | Fiji Islands | 165 |
| | | 16,611 µg STX eq./100g whole | Northwest Australia | 147 |

| | | | | |
|-------------------------------------|-------------------------|---------------------------------------------------------------------------------|-------------------------------|-----|
| | | 490 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| | | Positive GTX 1-4 | Taiwan | 166 |
| <i>Atergatopsis germaini</i> | Xanthid crab | Positive GTX 3, NEO, STX | Taiwan | 167 |
| <i>Demania reynaudi</i> | Xanthid crab | Positive GTX 3-4, NEO | Taiwan | 166 |
| <i>Eriphia scabricula</i> | Xanthid crab | 180 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| <i>Eriphia sebana</i> | Xanthid crab | Positive STX, NEO, GTX1, GTX2 | Great Barrier Reef, Australia | 168 |
| <i>Euzanthus exsculptus</i> | Xanthid crab | 29 µg STX eq./100g whole | Northwest Australia | 147 |
| <i>Lophozozymus octodentatus</i> | Xanthid crab | 23 µg STX eq./100g whole | Northwest Australia | 147 |
| <i>Lophozozymus pictor</i> | Xanthid crab | 18.9 MU g ⁻¹ whole crab | Australia | 169 |
| | | Positive GTX | Taiwan | 170 |
| <i>Neoxanthias impressus</i> | Xanthid crab | 147 µg STX eq./100g whole | Northwest Australia | 147 |
| | | 10 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| <i>Platypodia granulosa</i> | Xanthid crab | 110 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| <i>Platypodia pseudogranulosa</i> | Xanthid crab | 10 µg STX eq./100g whole | Northwest Australia | 147 |
| <i>Xanthias lividus</i> | Xanthid crab | Positive GTX | Taiwan | 171 |
| <i>Zosimus aeneus</i> | Xanthid crab | Positive STX, NEOSTX, GTXI-3 | Fiji Islands | 165 |
| | | Positive GTX | Taiwan | 171 |
| | | 660 MU g ⁻¹ whole | Ishigaki Island, Japan | 52 |
| | | 108,000 µg STX eq./100g chelae muscle; 720 µg STX eq./100g cephalothorax muscle | Japan | 172 |
| | | 78 µg STX eq./100g whole | Northwest Australia | 147 |
| | | 259 MU g ⁻¹ whole crab | Philippines | 173 |
| <i>Procambarus clarkii</i> | Red swamp crayfish | 0.23 MU g ⁻¹ hepatopancreas | Sanriku, Japan | 146 |
| <i>Carcinoscorpius rotundicauda</i> | Mangrove horseshoe crab | STX | Thailand | 174 |

* MU = mouse units (1MU = 0.18 µgSTX); ND = no data