

SUPPLEMENTARY FILE

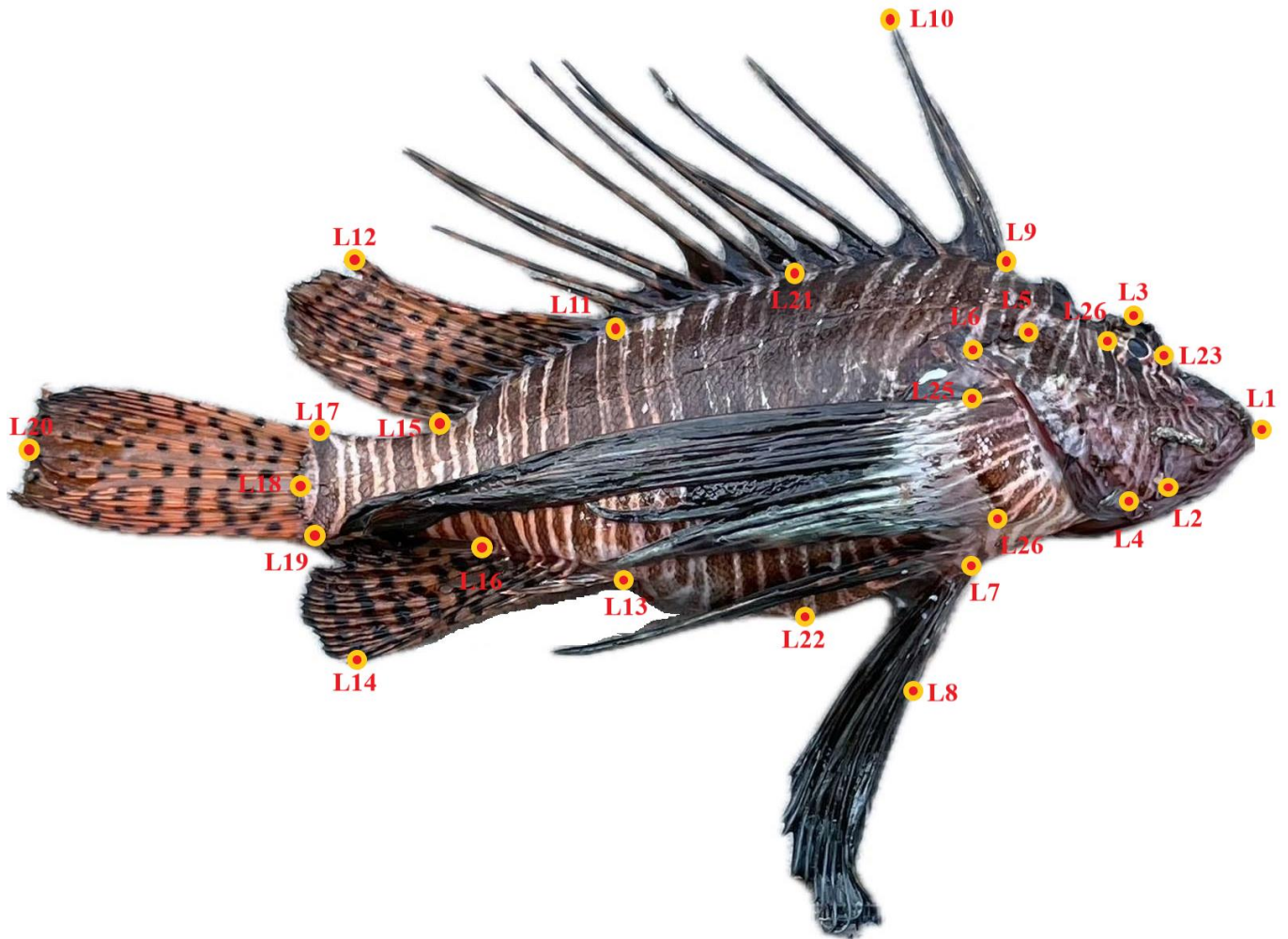


Figure S1. The used landmarks on a specimen of *Pterois miles* from the Messinian gulf, SW Greece.

Table S1. Detailed set of measurements obtained via ImageJ image processing and analysis software used in the morphometric analysis.

| Distance variables | Landmarks | Description of the distance to which the Landmarks are referred |
|--------------------|-----------|---|
| D1: | L1-L2 | Snout tip – end of mouth |
| D2: | L1-L3 | Snout tip – upper head limit |
| D3: | L1-L4 | Snout tip - lower limit of gill cover |
| D4: | L1-L5 | Snout tip - upper limit of gill cover |
| D5: | L3-L4 | upper head limit - lower limit of gill cover |
| D6: | L3-L9 | upper head limit - Dorsal fin base |
| D7: | L4-L5 | lower limit of gill cover- upper limit of gill cover |
| D8: | L9-L4 | Dorsal fin base - lower limit of gill cover |
| D9: | L4-L22 | lower limit of gill cover- Lower body depth |
| D10: | L9-L15 | Dorsal fin base |
| D11: | L9-L11 | Spinous dorsal fin base |
| D12: | L11-L15 | Non spinous dorsal fin base |

| | | |
|------|---------|---|
| D13: | L9-L10 | Dorsal fin height |
| D14: | L11-L12 | Non spinous dorsal fin height |
| D15: | L22-L11 | Lower body depth - Non spinous dorsal fin anterior limit |
| D16: | L22-L13 | Lower body depth – anal fin base |
| D17: | L22-L16 | Lower body depth – anal fin posterior limit |
| D18: | L13-L16 | Anal fin base |
| D19: | L13-L14 | Anal fin height |
| D20: | L13-L11 | Anal fin base - Non spinous dorsal fin anterior limit |
| D21: | L13-L15 | Anal fin base - Dorsal fin posterior limit |
| D22: | L9-L13 | Dorsal fin anterior limit – Anal fin anterior limit |
| D23: | L15-L17 | Dorsal fin posterior limit – Caudal fin upper limit |
| D24: | L16-L19 | Anal fin posterior limit – Caudal fin lower limit |
| D25: | L17-L19 | Caudal fin base |
| D26: | L18-L20 | Caudal fin length |
| D27: | L1-L9 | Snout tip – Dorsal fin anterior limit |
| D28: | L1-L25 | Snout tip – upper pectoral fin base limit |
| D29: | L1-L7 | Snout tip – pelvic fin base |
| D30: | L7-L8 | Pelvic fin height |
| D31: | L25-L26 | Pectoral fin base |
| D32: | L7-L9 | Pelvic fin base – Dorsal fin anterior limit |
| D33: | L1-L13 | Snout tip – anal fin anterior limit |
| D34: | L1-L20 | Total body length (TL) |
| D35: | L1-L18 | Standard body length (SL) |
| D36: | L1-L6 | Head length |
| D37: | L23-L24 | Horizontal eye diameter |
| D38: | L21-L22 | Body depth |
| D39: | L25-L17 | Upper pectoral fin base limit - Caudal fin upper limit |
| D40: | L7-L13 | Pelvic fin base - Anal fin anterior limit |
| D41: | L4-L7 | Lower limit of gill cover – Pelvic fin base |
| D42: | L1-L11 | Snout tip – Spinous dorsal fin posterior limit |
| D43: | L1-L15 | Snout tip – Dorsal fin posterior limit |
| D44: | L1-L16 | Snout tip – anal fin posterior limit |
| D45: | L7-L16 | Pelvic fin base - Anal fin posterior limit |
| D46: | L3-L2 | Body depth at eye |
| D47: | L11-L16 | Spinous dorsal fin posterior limit – Anal fin posterior limit |
| D48: | L9-L16 | Dorsal fin anterior limit – Anal fin posterior limit |
| D49: | L7-L11 | Pelvic fin base – Spinous dorsal fin posterior limit |
| D50: | L15-L16 | Dorsal fin posterior limit - Anal fin posterior limit |
| D51: | L1-L23 | Snout tip – eye posterior limit |
| D52: | L15-L19 | Dorsal fin posterior limit – Caudal fin lower limit |
| D53: | L16-L17 | Anal fin posterior limit – Caudal fin upper limit |

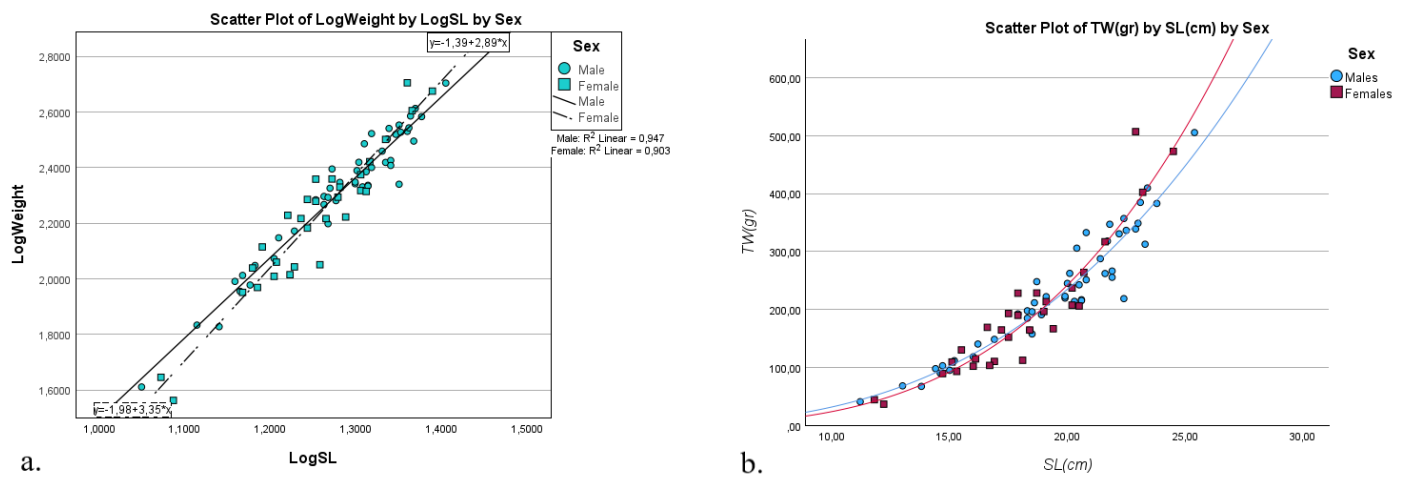


Figure S2. Relationships between: (a.) Log10 of total weight (TW, g) and Log10 of standard length (SL, cm); (b.) TW(g) and SL (cm), for males (●) and females (■) of Lionfish (*Pterois miles*) collected from the Messinian Gulf, SW Greece, July 2021–November 2021.

Table S2. Diet composition of 79 *P. miles* individuals (n, found number of specific prey item; %FO, percentage frequency of occurrence; Pi% prey specific abundance; %N, percentage numerical abundance; %W, percentage barometric composition; IRI index of relative importance: % IRI, index of relative importance expressed as percentage). A W%, Pi% of “zero” (0) indicates that the food item could not be weighted.

| Prey item | Parameter | | | | | | |
|--------------------------|-----------|----------|----------|----------|----------|----------|----------|
| | n | FO% | Pi% | N% | W% | IRI | %IRI |
| Unidentified teleost | 43 | 34.17722 | 45.92628 | 38.0531 | 15.79847 | 1840.497 | 47.89884 |
| <i>Chromis chromis</i> | 24 | 26.58228 | 95.98736 | 21.23894 | 42.83001 | 1703.099 | 44.32307 |
| <i>Apogon imberbis</i> | 6 | 5.063291 | 93.19265 | 5.309735 | 14.90052 | 102.3304 | 2.663144 |
| <i>Thalassoma pavo</i> | 6 | 5.063291 | 77.01863 | 5.309735 | 6.748226 | 61.05296 | 1.588901 |
| Unidentified crustacean | 5 | 6.329114 | 21.93784 | 4.424779 | 0.653054 | 32.13818 | 0.836395 |
| Paleamonidae | 8 | 3.797468 | 33.17536 | 7.079646 | 0.380948 | 28.33137 | 0.737323 |
| <i>Scorpaena porcus</i> | 2 | 2.531646 | 80.64516 | 1.769912 | 8.163176 | 25.14706 | 0.654451 |
| Gobiidae | 2 | 2.531646 | 76.76056 | 1.769912 | 5.931908 | 19.49828 | 0.507442 |
| Blennidae | 2 | 2.531646 | 48.3871 | 1.769912 | 0.816318 | 6.547416 | 0.170396 |
| Unidentified seaweed | 2 | 2.531646 | 0 | 1.769912 | 0 | 4.480789 | 0.116612 |
| Labridae | 1 | 1.265823 | 59.29878 | 0.884956 | 2.116984 | 3.799923 | 0.098893 |
| Nematoda | 3 | 1.265823 | 0 | 2.654867 | 0 | 3.360591 | 0.087459 |
| <i>Stenopus spinosus</i> | 1 | 1.265823 | 23.25581 | 0.884956 | 1.088424 | 2.497948 | 0.065009 |
| Gammaridae | 2 | 1.265823 | 0 | 1.769912 | 0 | 2.240394 | 0.058306 |
| Unidentified crab | 1 | 1.265823 | 11.11111 | 0.884956 | 0.272106 | 1.464635 | 0.038117 |
| <i>Atherina sp.</i> | 1 | 1.265823 | 100 | 0.884956 | 0.207345 | 1.382659 | 0.035984 |
| <i>Pagurus sp.</i> | 1 | 1.265823 | 4.761905 | 0.884956 | 0.054421 | 1.189085 | 0.030946 |
| <i>Galathea strigosa</i> | 1 | 1.265823 | 1.067073 | 0.884956 | 0.038095 | 1.168418 | 0.030408 |
| <i>Jujubinus sp.</i> | 1 | 1.265823 | 0 | 0.884956 | 0 | 1.120197 | 0.029153 |
| <i>Cymodocea nodosa</i> | 1 | 1.265823 | 0 | 0.884956 | 0 | 1.120197 | 0.029153 |