



Supplementary materials

Quantitative and Qualitative HPLC Analysis of Mycosporine-Like Amino Acids Extracted in Distilled Water for Cosmetical Uses in Four Rhodophyta

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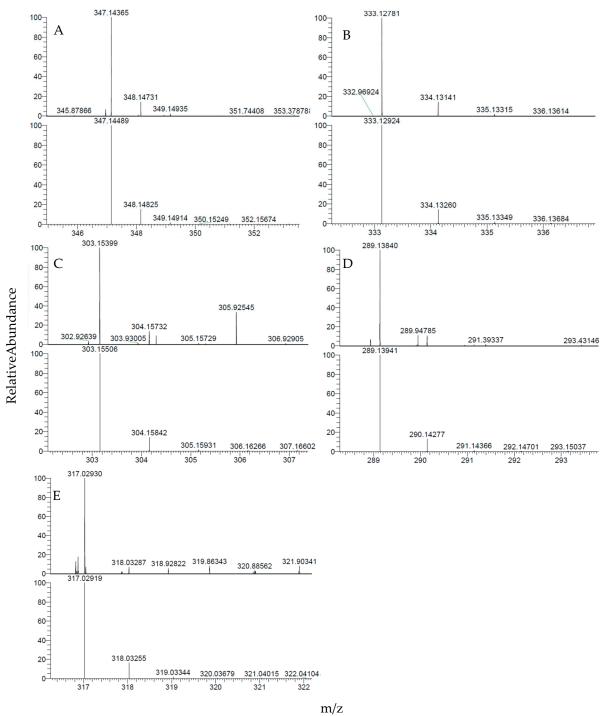


Figure S1. Mass spectrum of A (porphyra-334), B (shinorine), C (palythine), D (asterina-330) and E (myricetin) in *Agarophyton vermiculophyllum*.

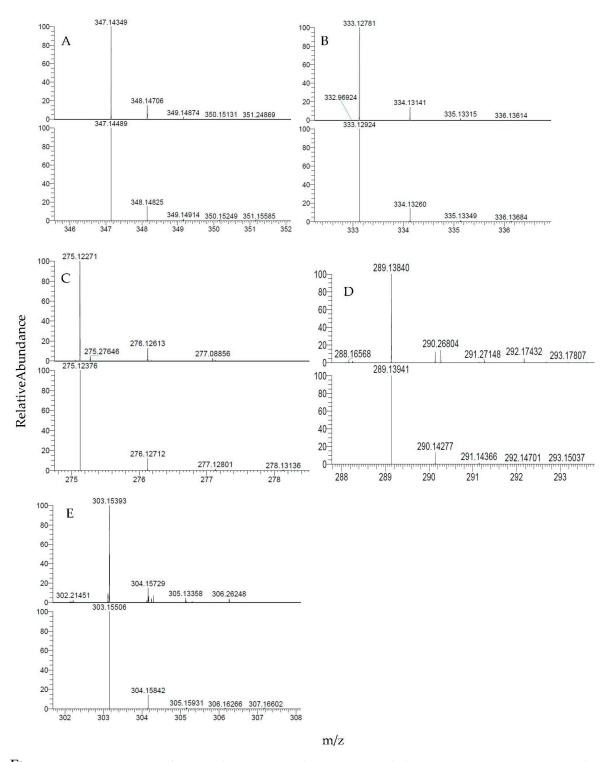


Figure S2. Mass spectrum of A (porphyra-334), B (shinorine), C (palythine-serine), D (asterina-330) and E (palythinol) in *Crassiphycus corneus*.

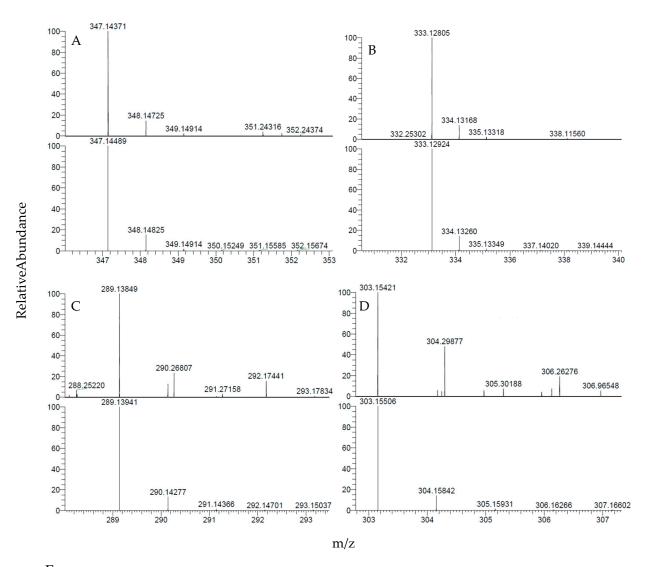


Figure S3. Mass spectrum of A (porphyra-334), B (shinorine), C (asterina-330) and D (palythinol) in *Gracilariopsis* longissima.

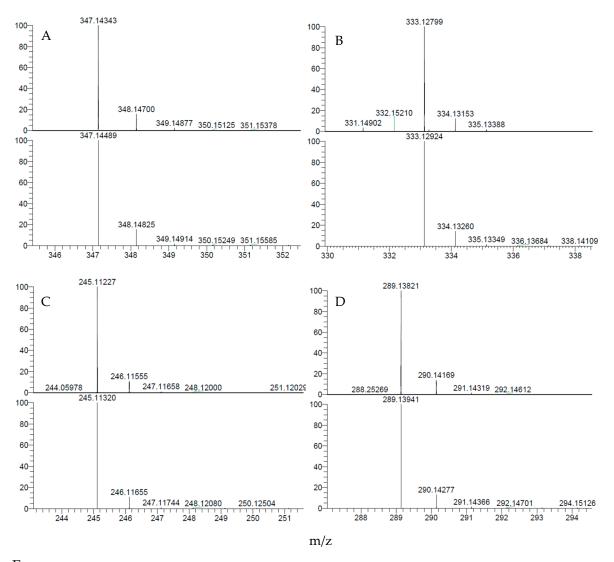


Figure S4. Mass spectrum of A (porphyra-334), B (shinorine), C (palythine) and D (asterina-330) in *Pyropia leucosticta*.

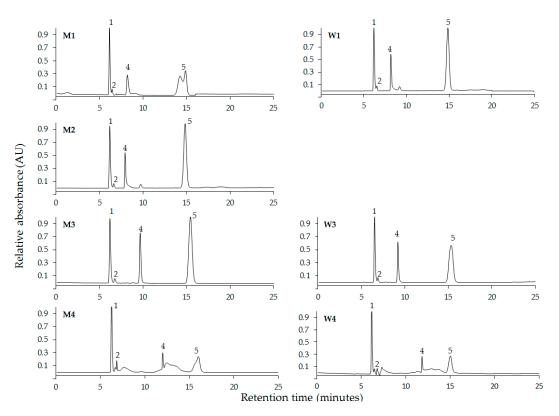


Figure S5. HPLC normalized chromatograms of MAAs identified in *Agarophyton vermiculophyllum* by seven methodological protocols using the Luna-C8 column. The code of protocol is indicated based on extraction and re-dissolution solvents used (see figure 1 legend). Numbers indicate: 1 (palythine), 2 (asterina-330), 4 (shinorine), and 5 (porphyra-334).

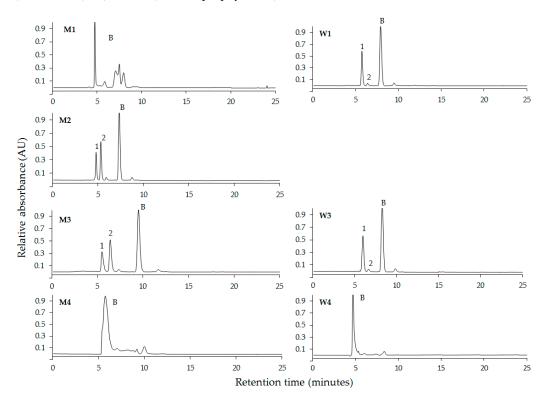


Figure S6. HPLC normalized chromatograms of MAAs identified in *Agarophyton vermiculophyllum* by seven methodological protocols using the Infinity Lab Poroshell 120 C18column. The code of protocol is indicated based on extraction and re-dissolution solvents used (see figure 1 legend). Numbers indicate: 1 (palythine), 2 (asterina-330), and B (mixed unidentifiable peaks).

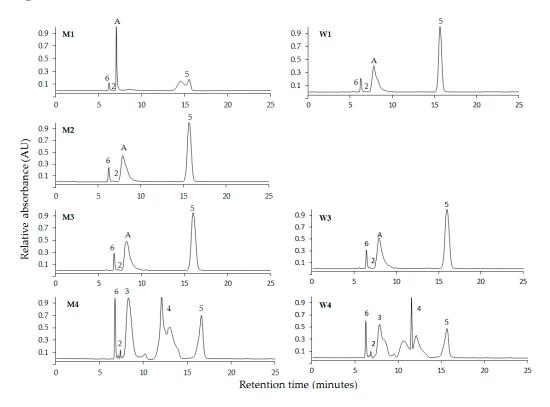


Figure S7. HPLC normalized chromatograms of MAAs identified in *Crassiphycus corneus* by seven methodological protocols using theLuna-C8 column. The code of protocol is indicated based on extraction and re-dissolution solvents used (see figure 1 legend). Numbers indicate: 2 (asterina-330), 3 (palythinol), 4 (shinorine), 5 (porphyra-334), 6 (palythine-serine), and A (mixture of palythinol and shinorine).

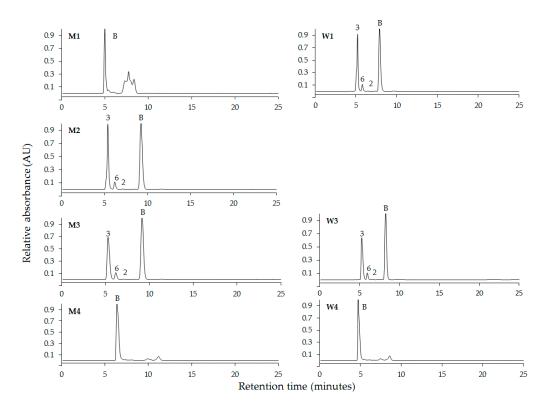


Figure S8. HPLC normalized chromatograms of MAAs identified in *Crassiphycus corneus* by seven methodological protocols using the Infinity Lab Poroshell 120 C18 column. The code of protocol is indicated based on extraction and re-dissolution solvents used (see figure 1 legend). Numbers indicate: 2 (asterina-330), 3 (palythinol), 6 (palythine-serine), and B (mixed unidentifiable peaks).

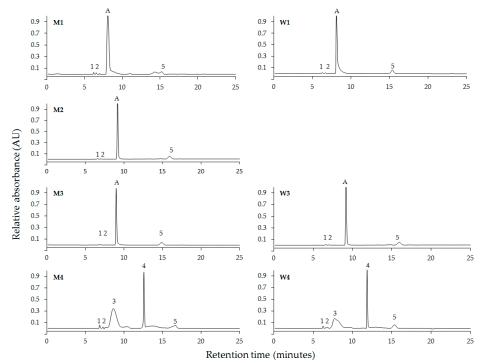


Figure S9. HPLC normalized chromatograms of MAAs identified in *Gracilariopsis longissima* by seven methodological protocols using the Luna-C8 column. The code of protocol is indicated based on extraction and re-dissolution solvents used (see figure 1 legend). Numbers indicate: 1 (palythine), 2 (asterina-330), 3 (palythinol), 4 (shinorine), 5 (porphyra-334), and A (mixture of palythinol and shinorine).

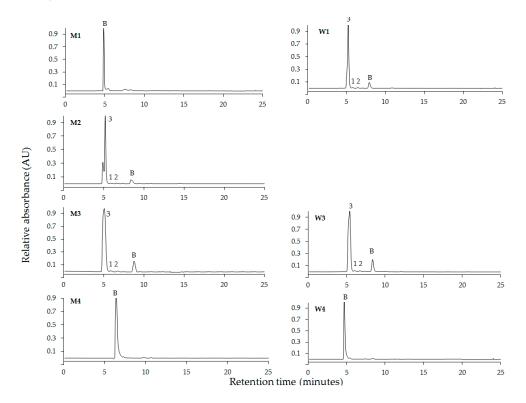


Figure S10. HPLC normalized chromatograms of MAAs identified in *Gracilariopsis longissima* by seven methodological protocols using the Infinity Lab Poroshell 120 C18 column. The code of protocol is indicated based on extraction and re-dissolution solvents used (see figure 1 legend). Numbers indicate: 1 (palythine), 2 (asterina-330), 3 (palythinol), and B (mixed unidentifiable peaks).