

SUPPLEMENTARY MATERIAL

Table S1, ANOVA results after seasonal experiment testing for the effect of season on the MAAs total accumulation in *Nothogenia fastigiata*, *Iridaea tuberculosa* and *C. officinalis*, $p < 0.05^{**}$

		Total MAAs			
		<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
<i>N. fastigiata</i>	<i>season</i>	3	1.794823687	65.97504932	**
	<i>Res</i>	8	0.027204583		
<i>I. tuberculosa</i>	<i>season</i>	8	2264.59	3952.9	**
	<i>Res</i>	18	0.57		
<i>C. officinalis</i>	<i>season</i>	8	3092.48	15272.6	**
	<i>Res</i>	18	0.2		

Res: Residual

Table S2.A Person correlation between Solar radiation; in UVB, UVA and PAR and total MAAs in *Nothogenia fastigiata* along to the seasonal time.

<i>N. fastigiata</i>	UVB	UVA	PAR
Total MAAs	0,814 0,00129	0,810 0,00139	0,809 0,00143
UVB		1,000 4,014E-023	1,000 6,037E-022
UVA			1,000 3,494E-028

Table S2.B Person correlation between Solar radiation; in UVB, UVA and PAR and total MAAs in *Iridaea tuberculosa*, along to the seasonal time.

<i>I. tuberculosa</i>	UVB	UVA	PAR
Total MAAs	-0,104 0,747	-0,106 0,742	-0,107 0,740
UVB		1,000 4,014E-023	1,000 6,037E-022
UVA			1,000 3,494E-028

29 Table S2.C Person correlation between Solar radiation; in UVB, UVA and PAR and total MAAs
 30 in *Corallina officinalis* along to the seasonal time.

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<i>C. officinalis</i>	UVB	UVA	PAR
Total MAAs	0,790	0,792	0,793
	0,00221	0,00214	0,00211
UVB		1,000	1,000
		4,014E-023	6,037E-022
UVA			1,000
			3,494E-028

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34 Table S2, ANOVA results after seasonal experiment testing for the effect of season on the MAAs
 35 content in *N. fastigiata*, *I. tuberculosa* and *C. officinalis* sp. $p < 0.05^{**}$

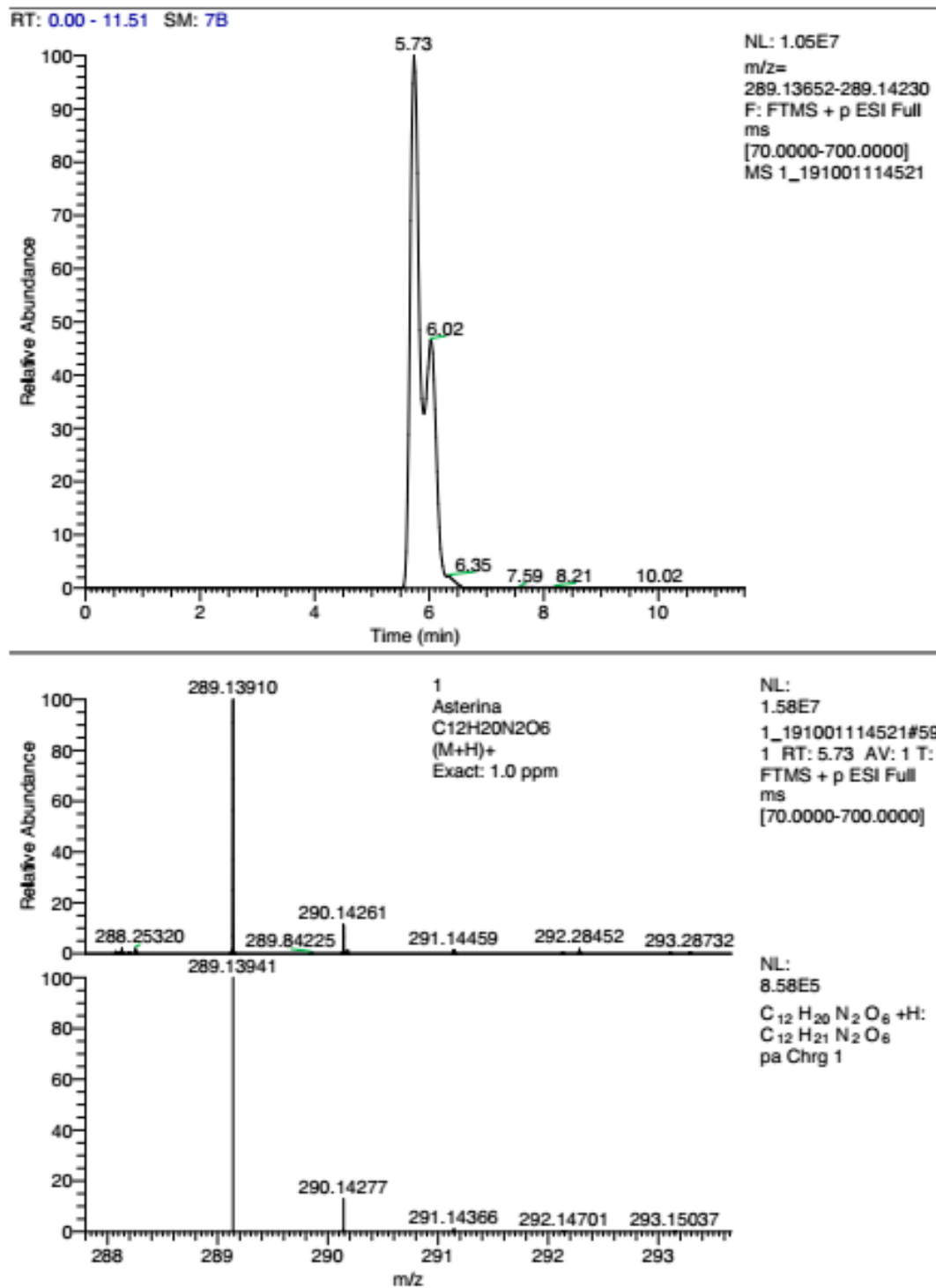
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			<i>MAAs contents</i>			
			<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
<i>N. fastigiata</i>	%Palithynol	Season	3	433	2.6	0.12
		Res	8	165		
	%Porphyra 334	Season	3	423	2.7	0.11
		Res	8	154		
	%Shinorine	Season	3	1.5	3.5	0.07
		Res	8	0.4		
	%Asterine 330	Season	3	18	132	**
		Res	8	0.1		
	%Palythine	Season	3	0.03	26	**
		Res	8	0.001		
<i>I. tuberculosa</i>	%Palithynol	Season	3	433	2.6	0.12
		Res	8	165		
	%Porphyra 334	Season	3	<i>nd</i>	<i>nd</i>	<i>nd</i>
		Res	8			
	%Shinorine	Season	3	520	34.4	**
		Res	8	15		
	%Asterine 330	Season	3	0.81	9.7	**
		Res	8	0.08		
	%Palythine	Season	3	91	3.2	0.09
		Res	8	28.		
<i>C. officinalis</i>	%Palithynol	Season	3	215	7.0	**
		Res	8	30		
	%Porphyra 334	Season	3	46	3.3	0.08
		Res	8	13		
	%Shinorine	Season	3	285	2.5	0.13
		Res	8	114		
	%Asterine 330	Season	3	3.4	0.9	0.45
		Res	8	3.5		
	%Palythine	Season	3	22	0.9	0.45
		Res	8	22		

37 Res: Residual; nd: no data

38 Figure S1.- Mycosporine like amino acid in *Nothogenia fastigiata*, Asterine-330

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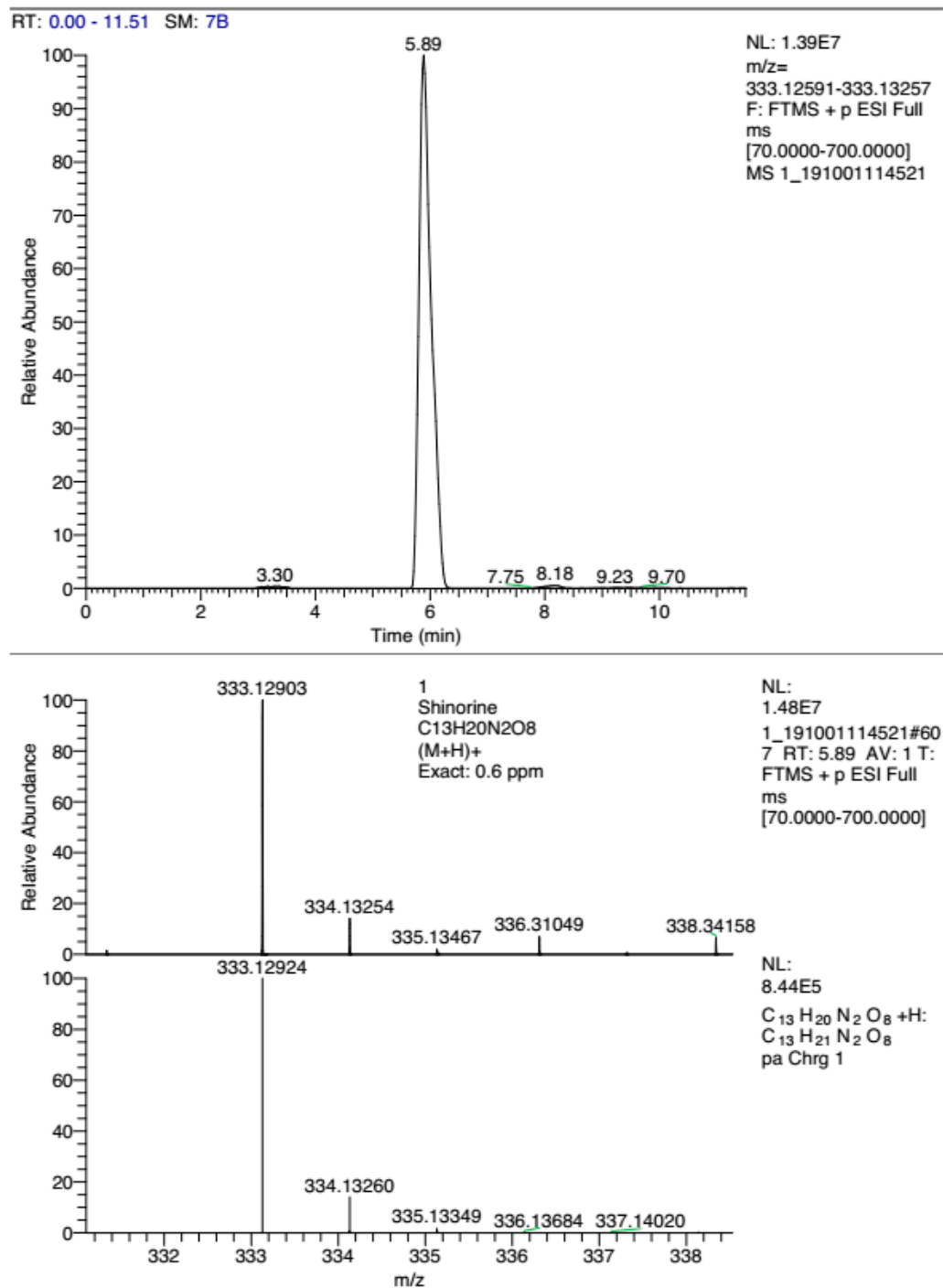
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43 Figure S2.- Mycosporine like amino acid in *Nothogenia fastigiata*, Shinorine

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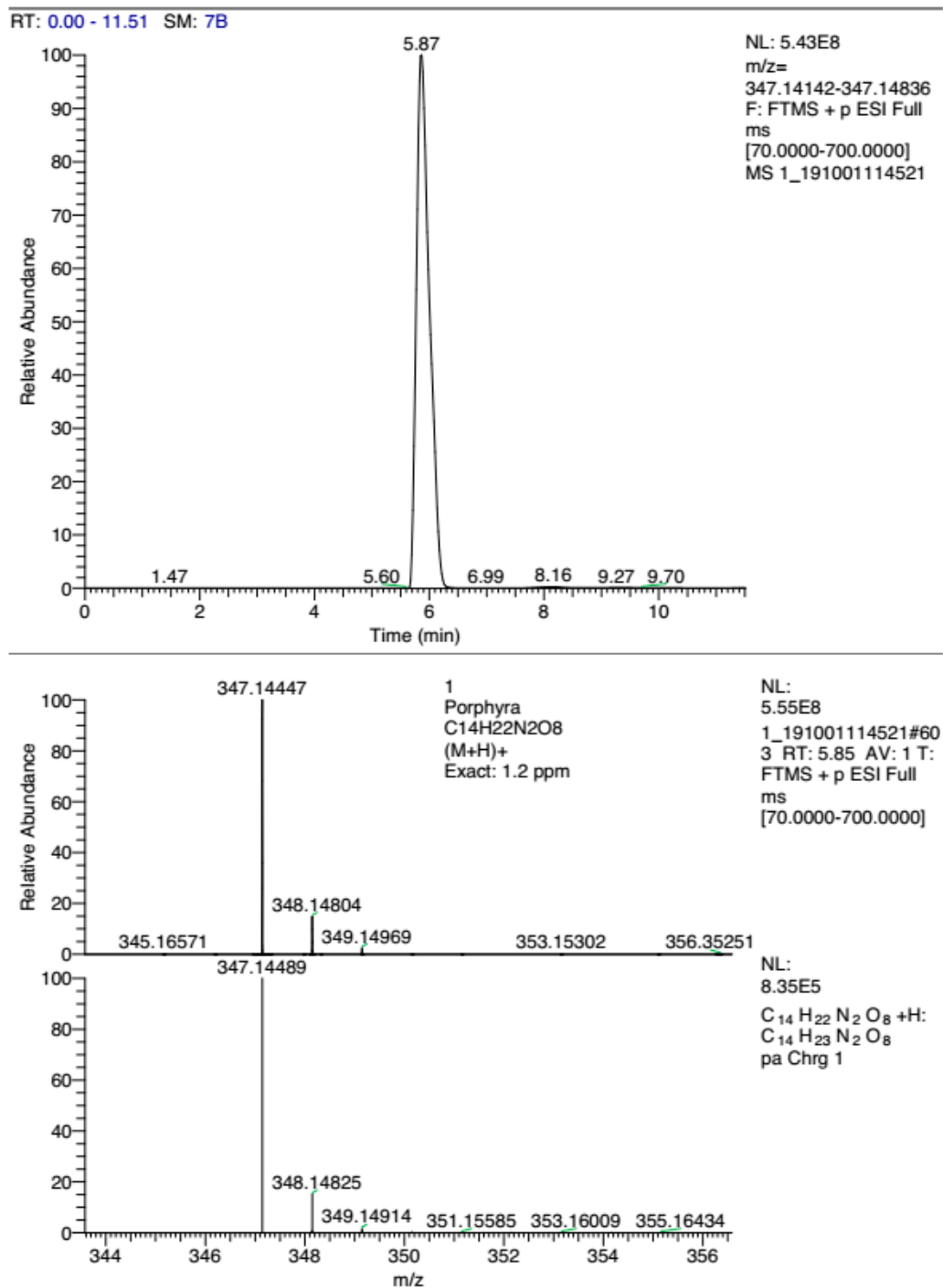
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49 Figure S3.- Mycosporine like amino acid in *Nothogenia fastigiata*, Porphyra-334

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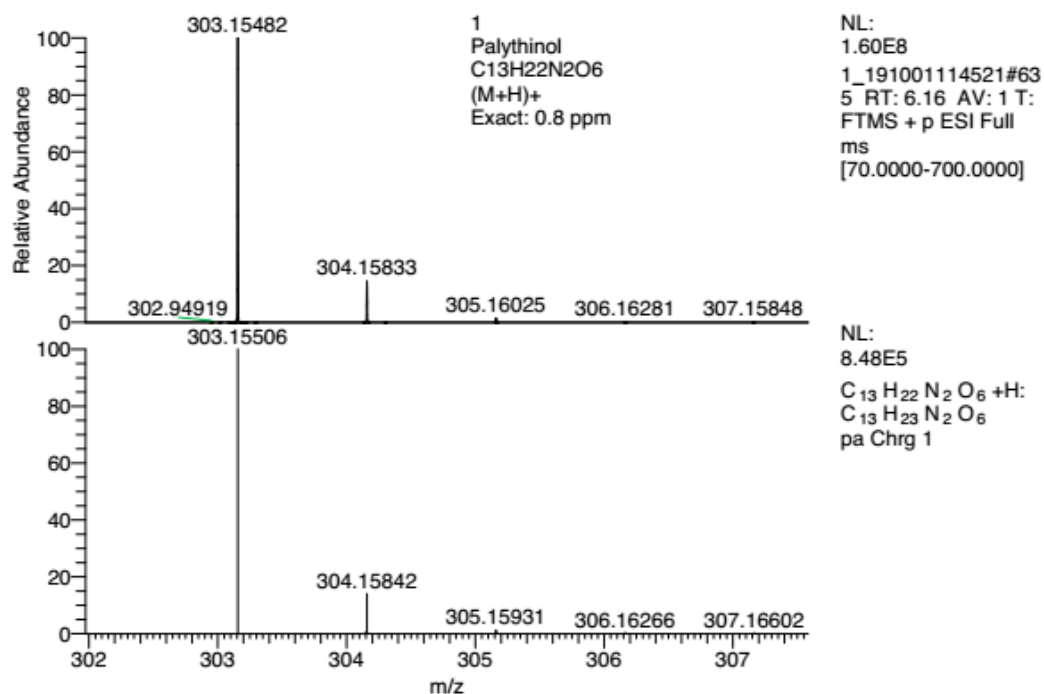
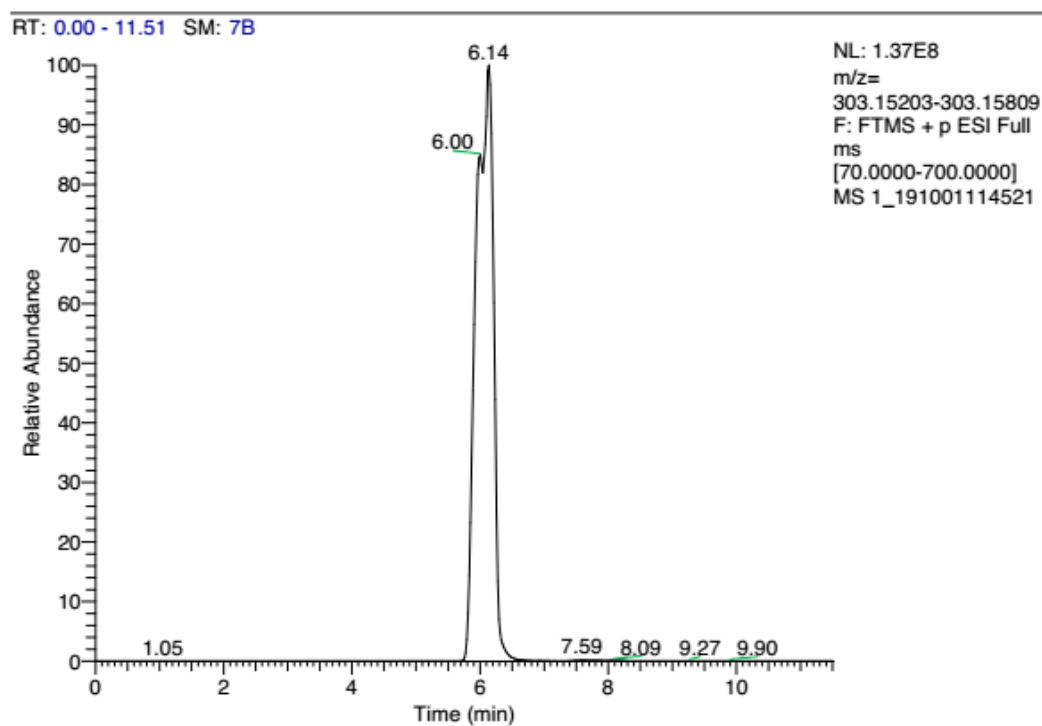
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55 Figure S4.- Mycosporine like amino acid in *Nothogenia fastigiata*, Palythanol

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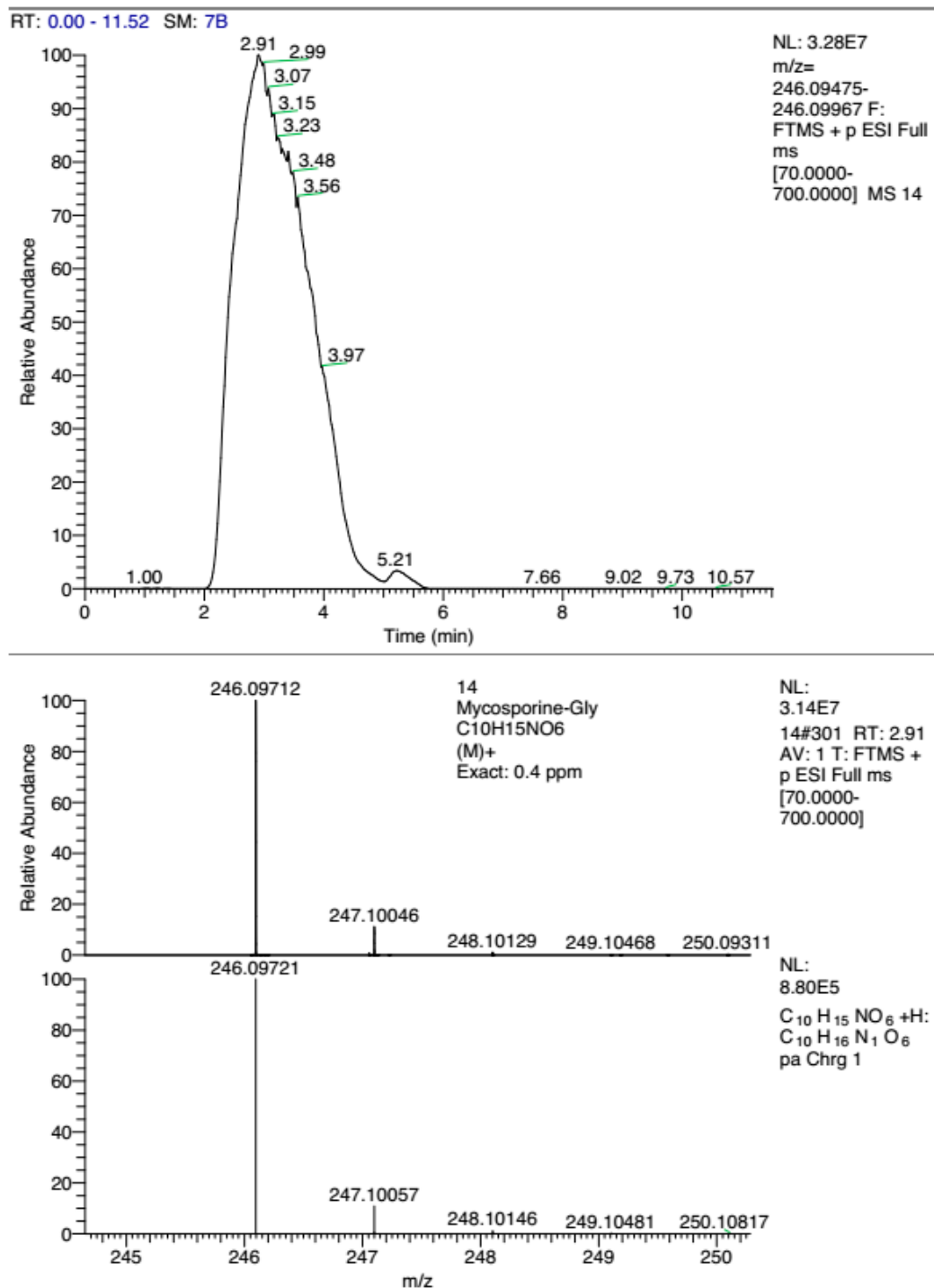
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61 Figure S5.- Mycosporine like amino acid in *Iridaea tuberculosa*, Mycosporine-Gly

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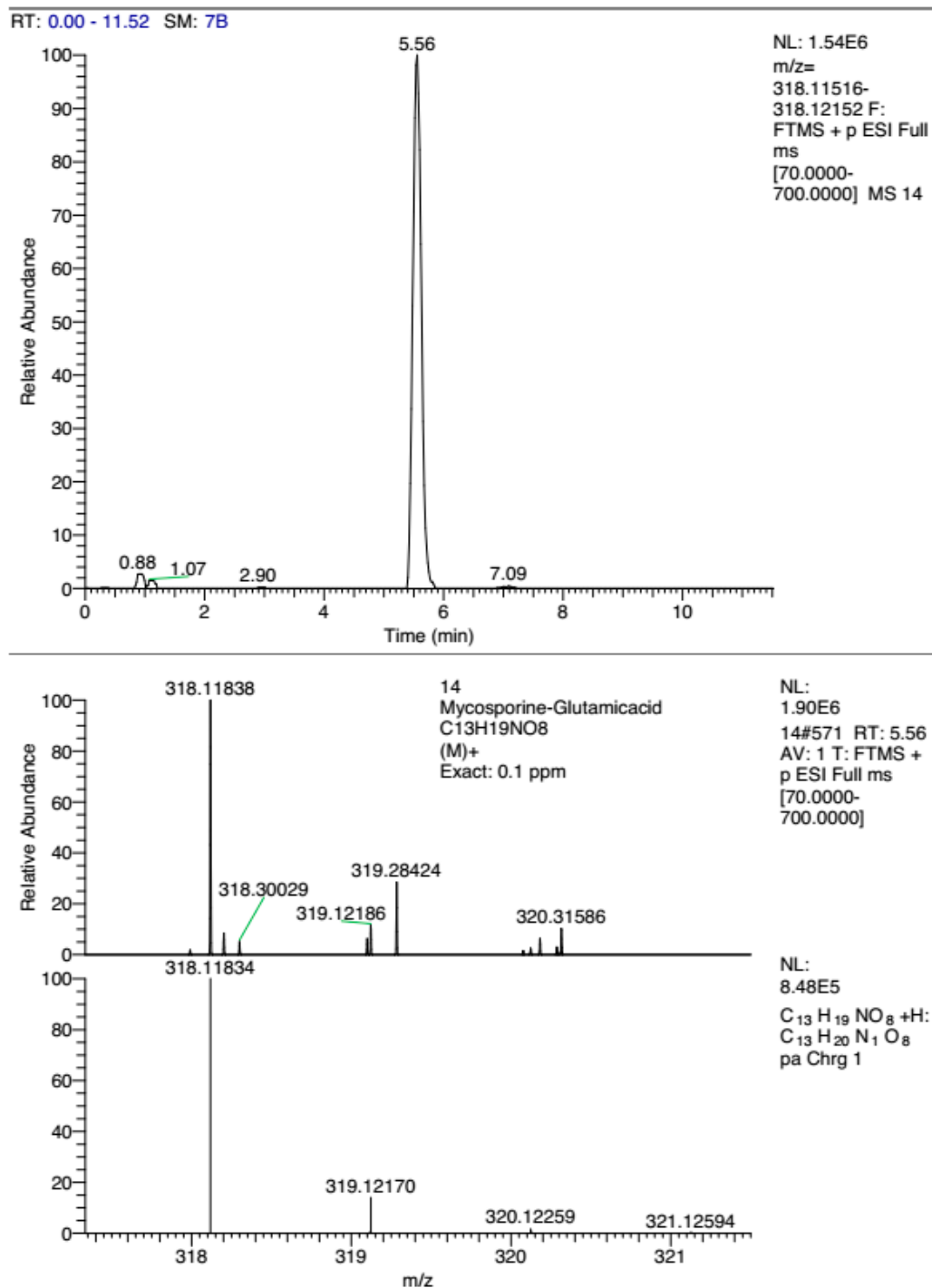
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67 Figure S6.- Mycosporine like amino acid in *Iridaea tuberculosa*, Mycosporine-Glutamic acid

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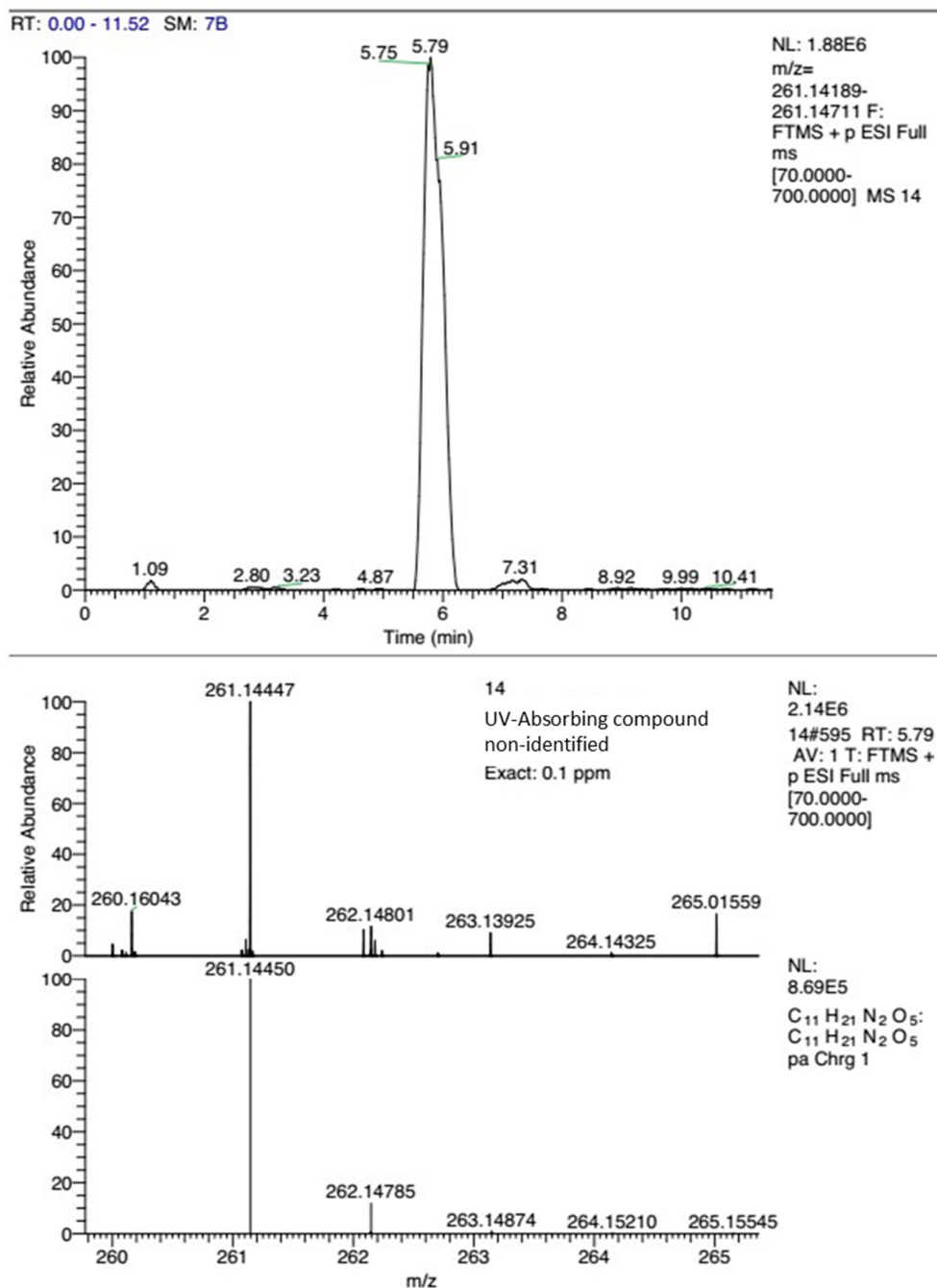
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72 Figure S7.- Mycosporine like amino acid in *Iridaea tuberculosa*, UV-Absorbing compound non-
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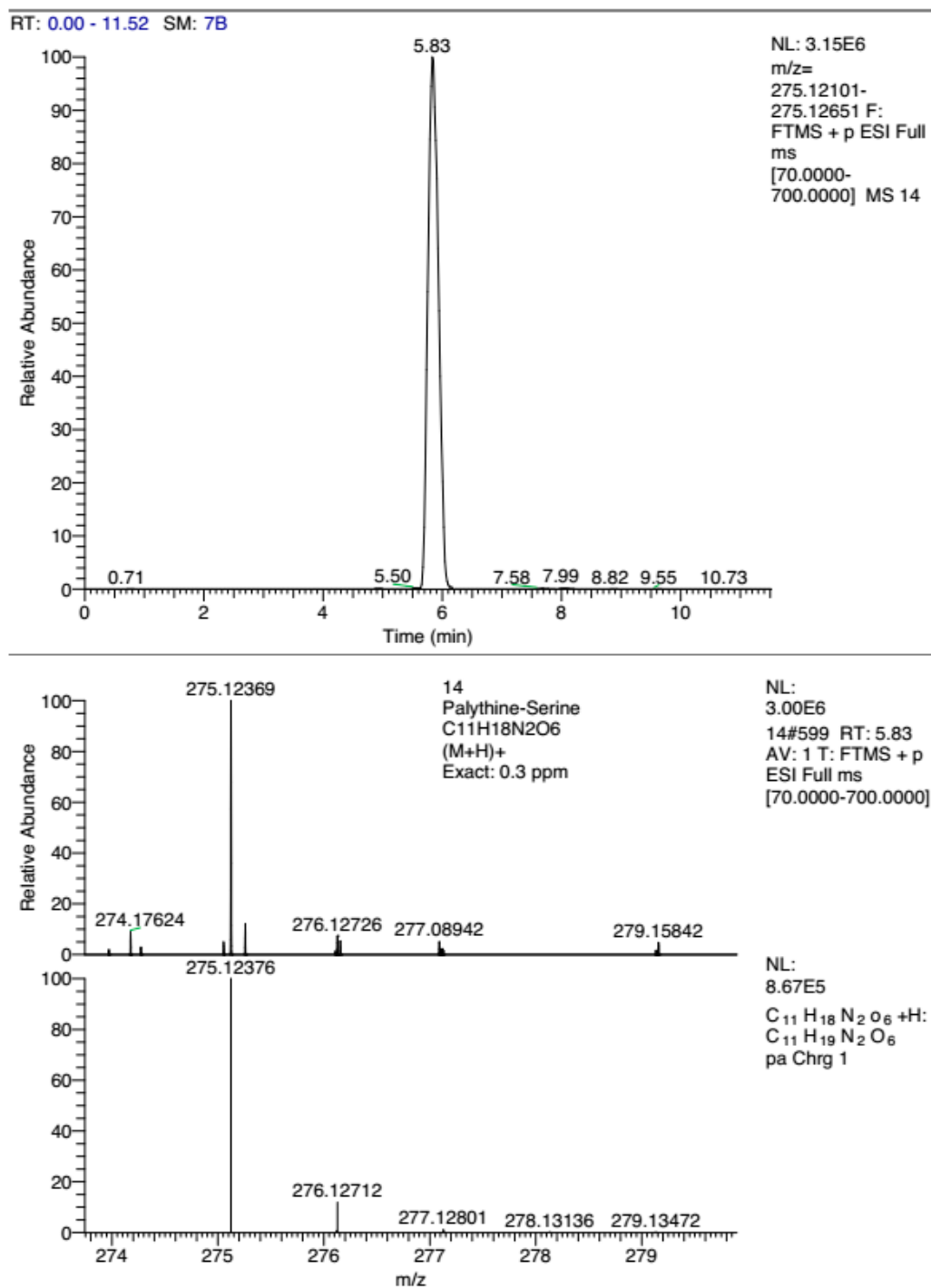
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80 Figure S8.- Mycosporine like amino acid in *Iridaea tuberculosa*, Palythine-Serine

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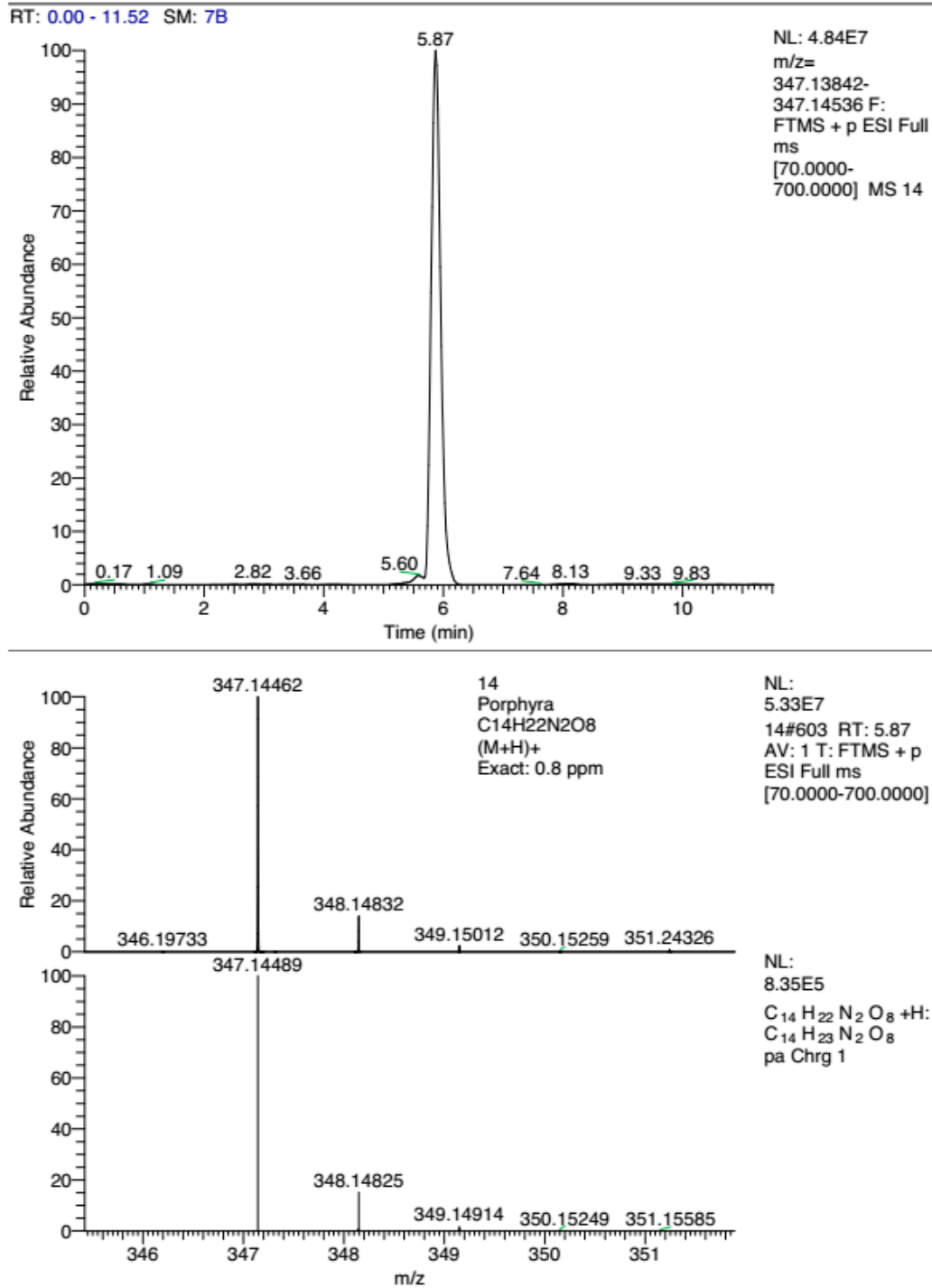
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86 Figure S9.- Mycosporine like amino acid in *Iridaea tuberculosa*, Porphyra-334

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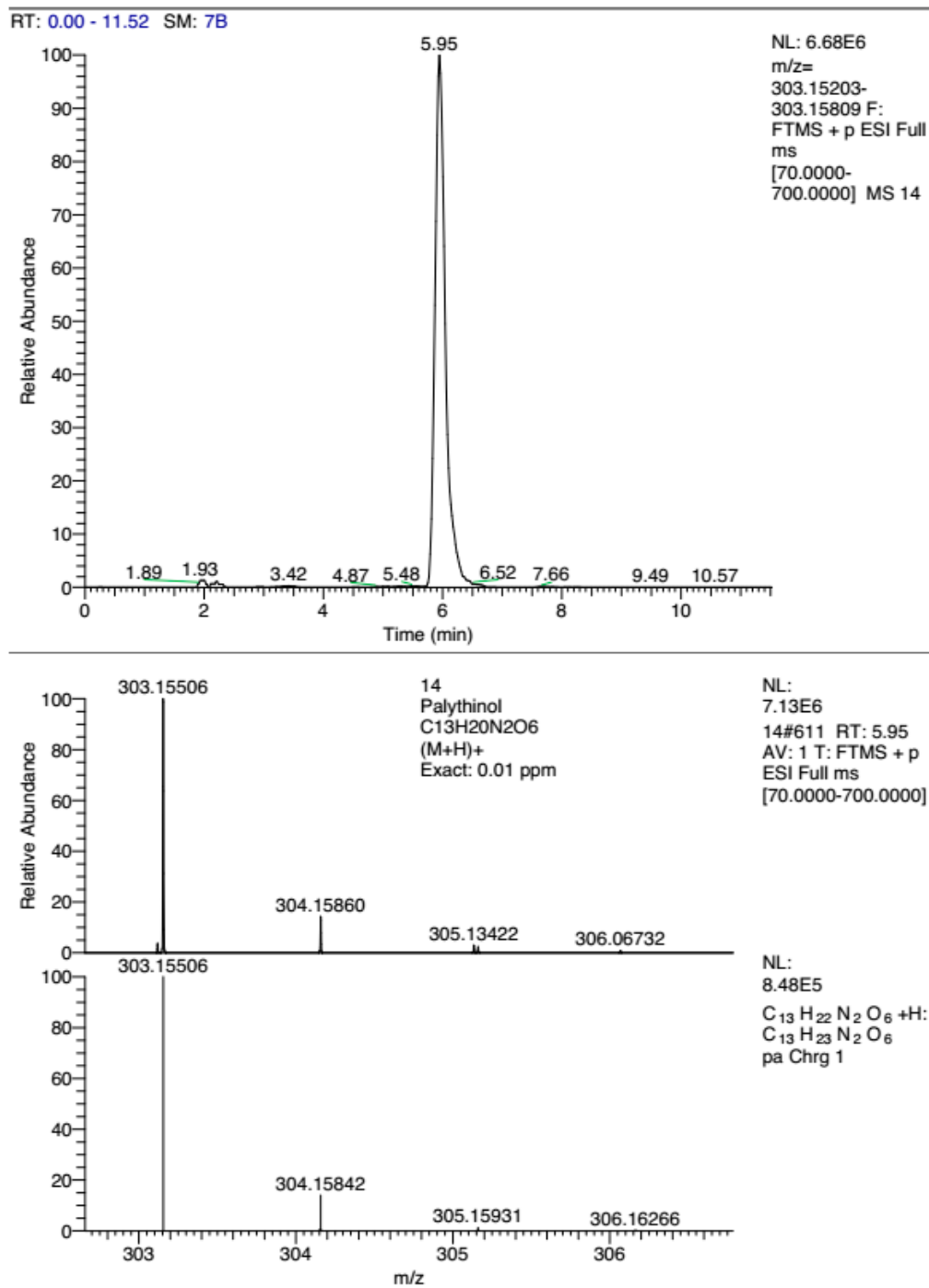
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92 Figure S10.- Mycosporine like amino acid in *Iridaea tuberculosa*, Palythanol

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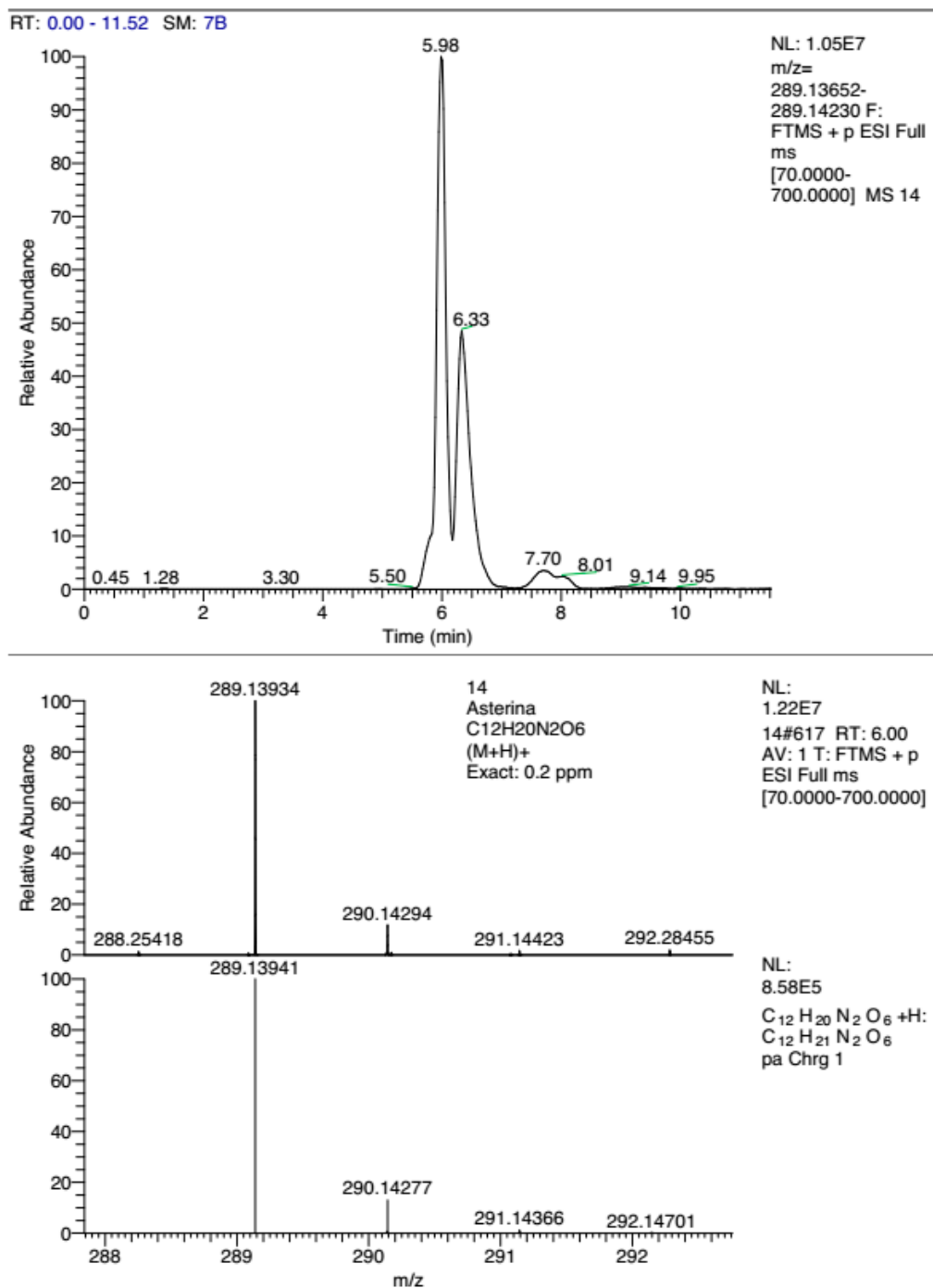
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99 Figure S11.- Mycosporine like amino acid in *Iridaea tuberculosa*, Asterine-330

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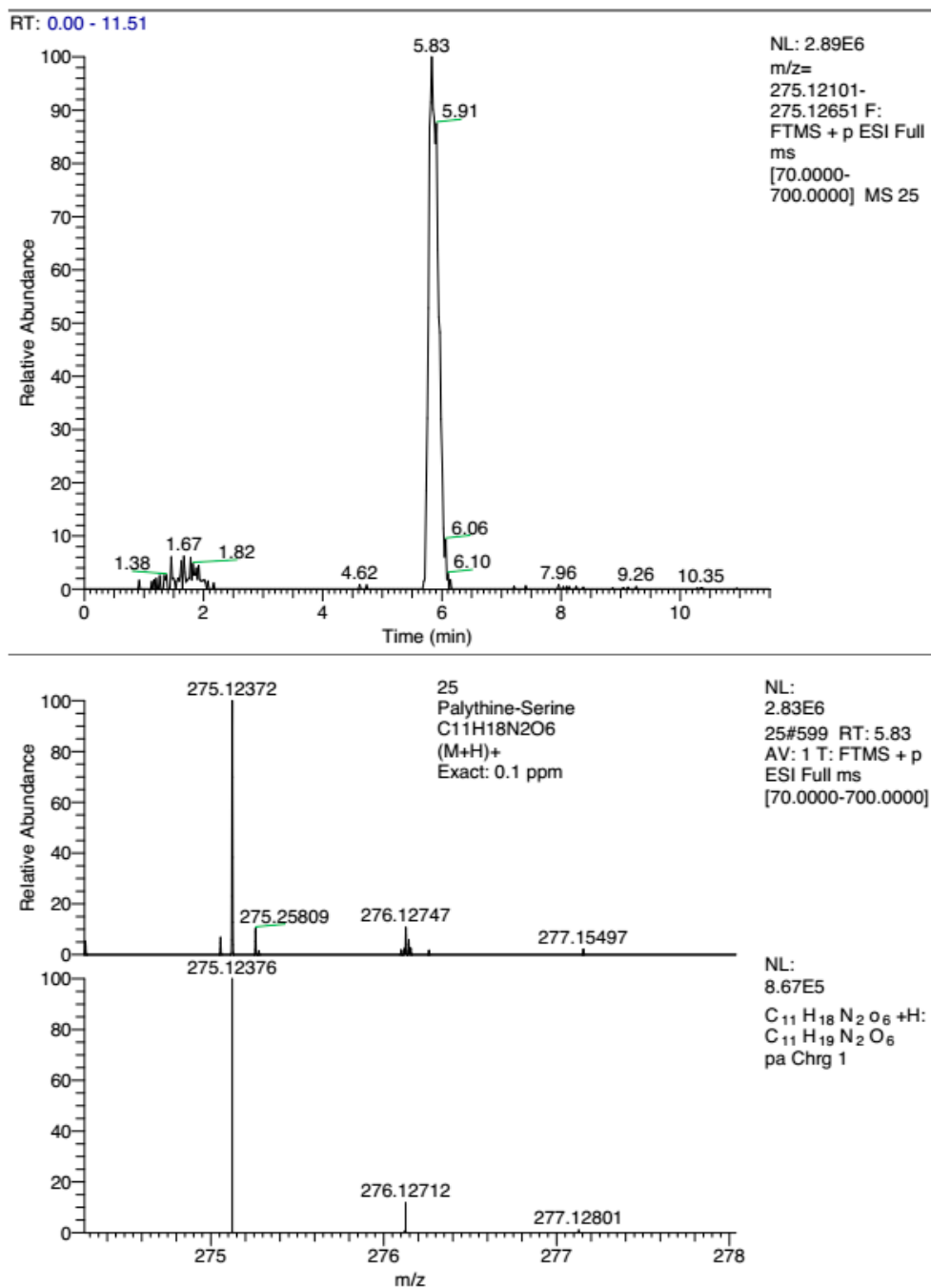
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105 Figure S12.- Mycosporine like amino acid in *Corallina officinalis*, Palythine-Serine

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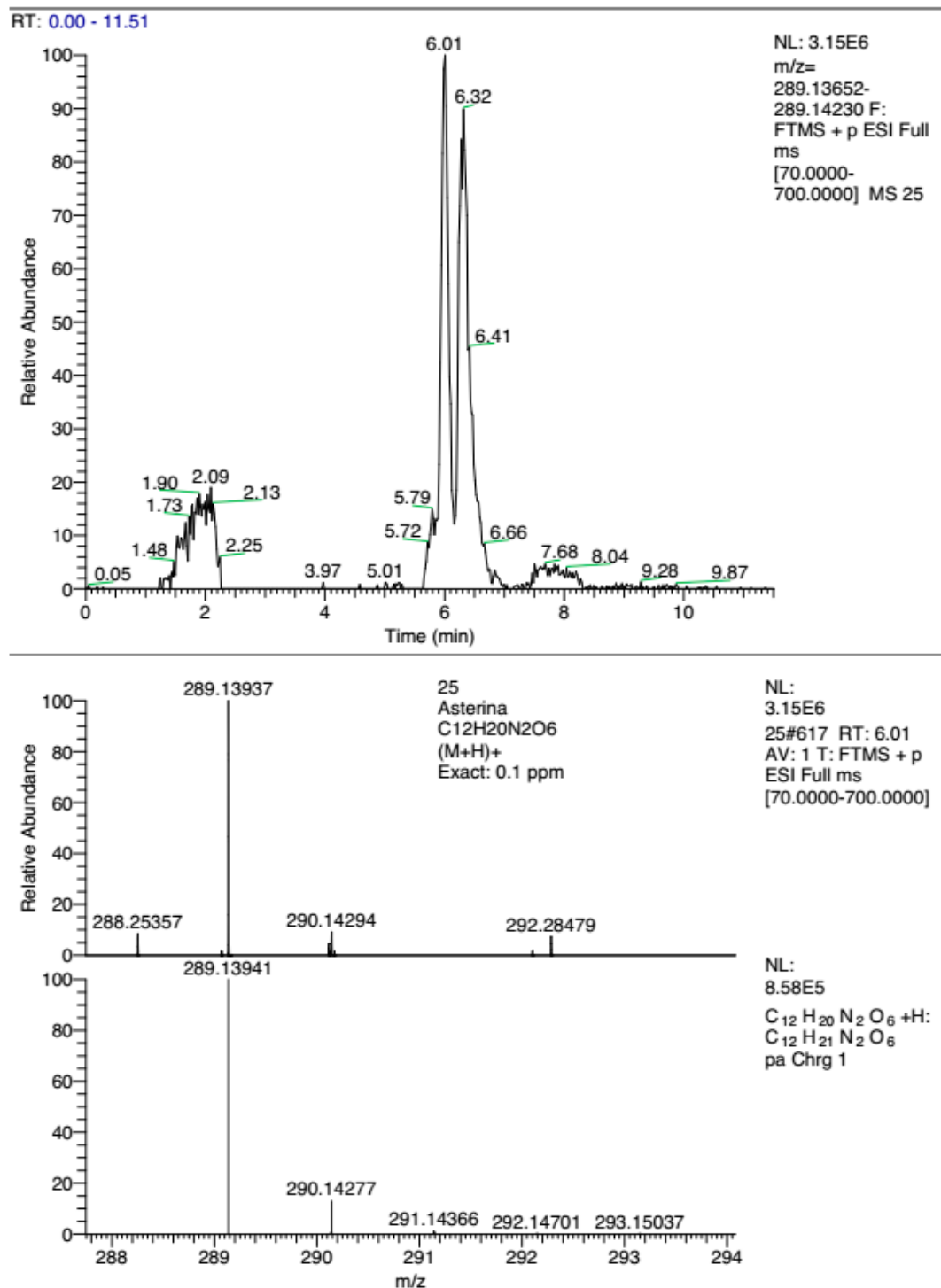
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113 Figure S13.- Mycosporine like amino acid in *Corallina officinalis*, Asterine-330

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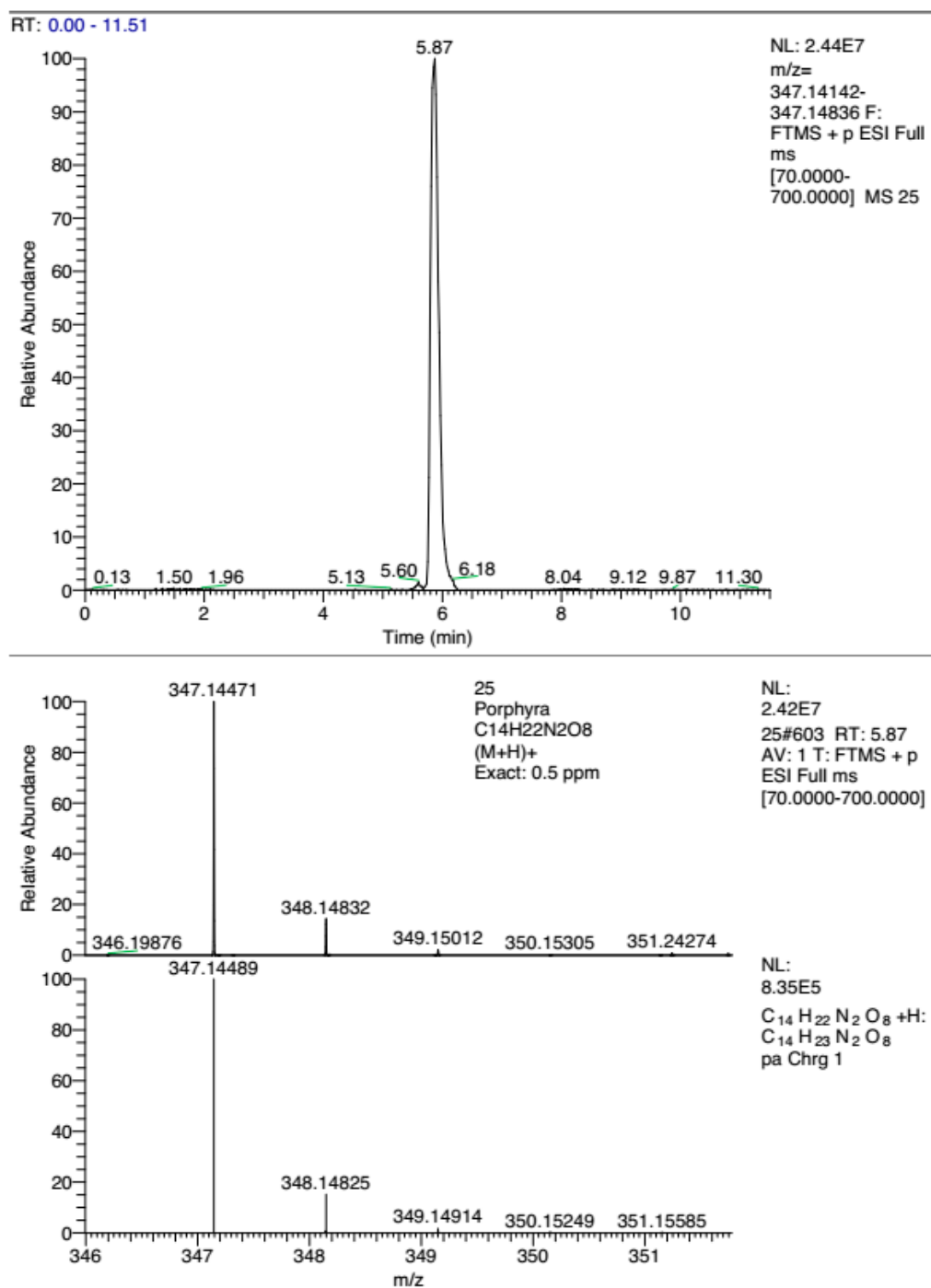
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118 Figure S14.- Mycosporine like amino acid in *Corallina officinalis*, Porphyra-334

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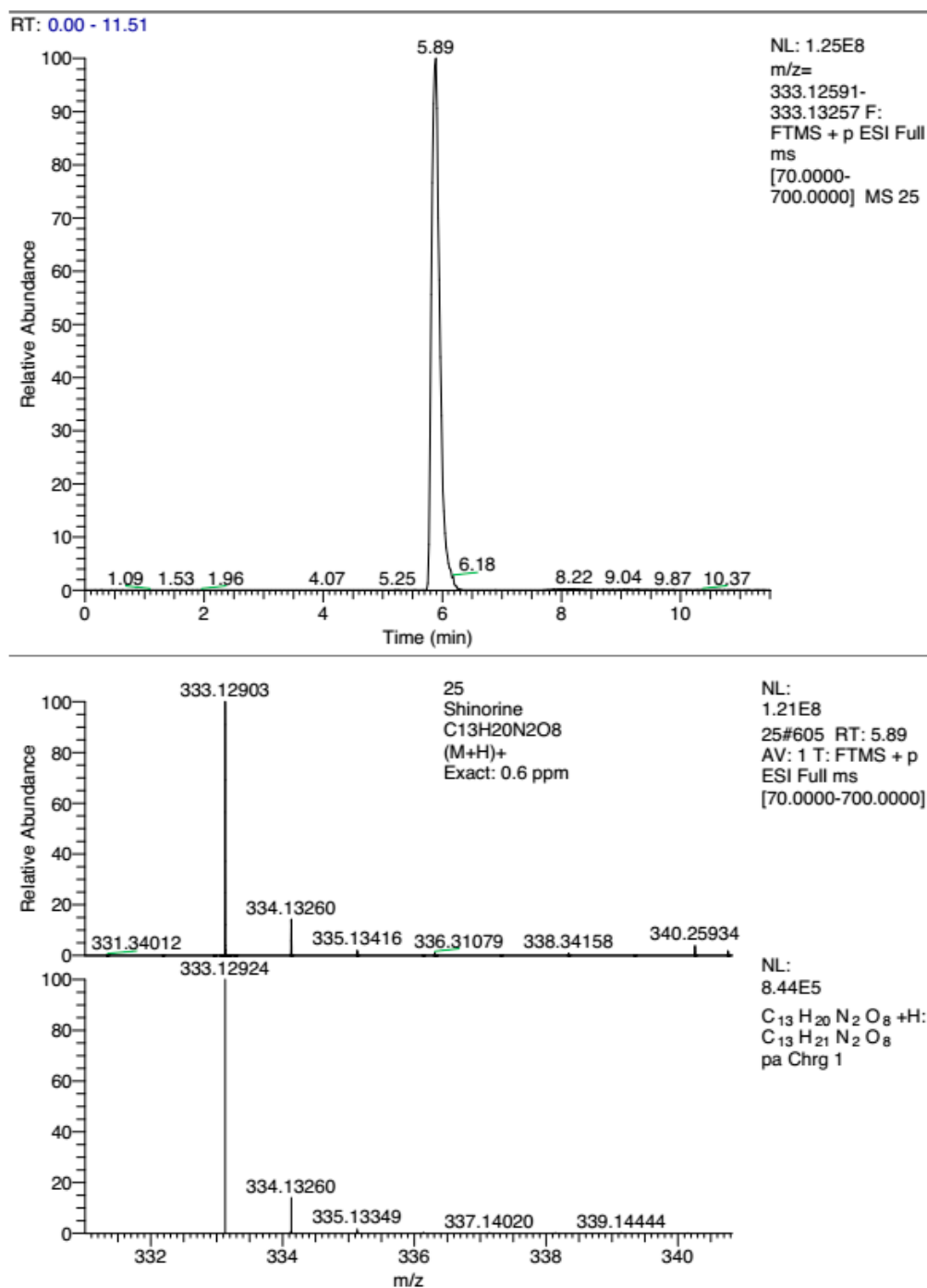
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125 Figure S15.- Mycosporine like amino acid in *Corallina officinalis*, Shinorine

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