

# Supplementary material

## Antibacterial, antidiabetic and toxicity effects of two Brown algae: *Sargassum buxifolium* and *Padina gymnospora*

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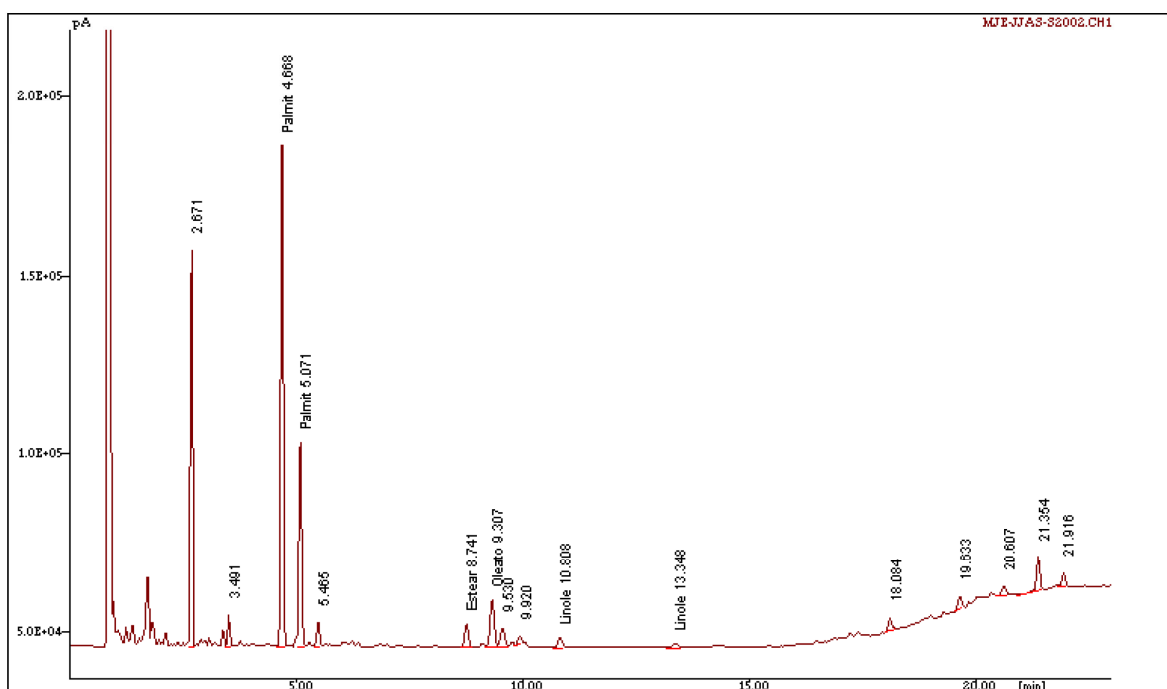
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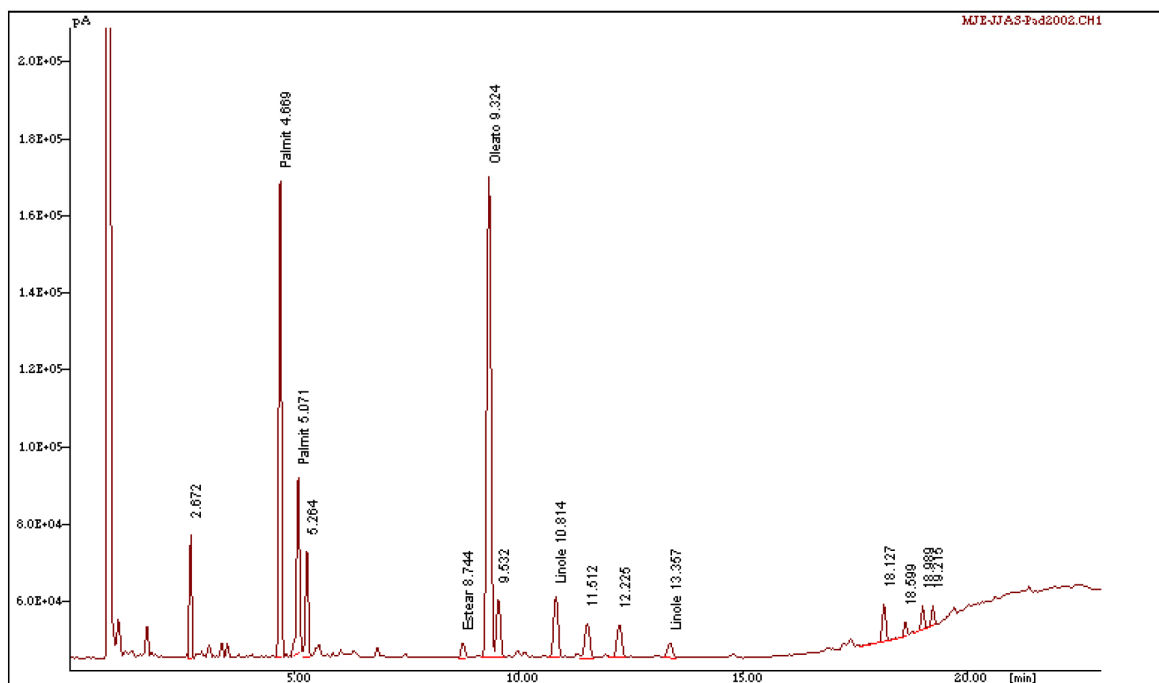
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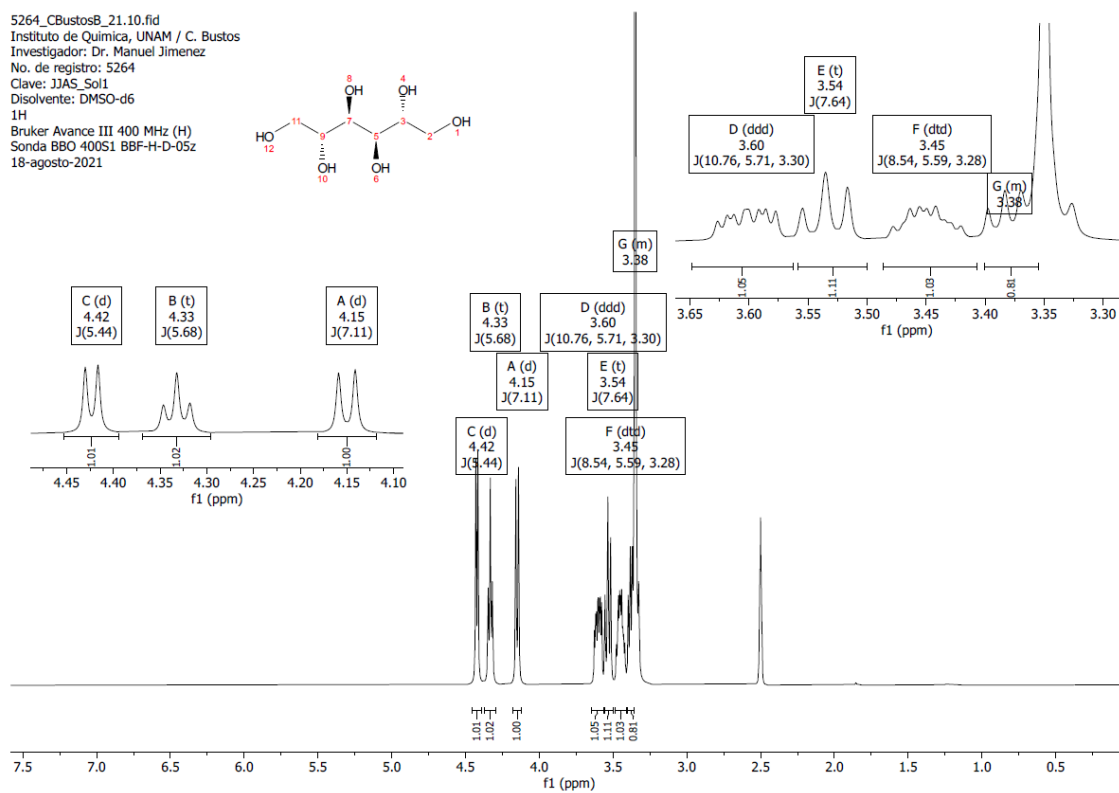


**Figure S1:** Chromatogram, FAMES from hexanic extract of *Sargassum buxifolium*



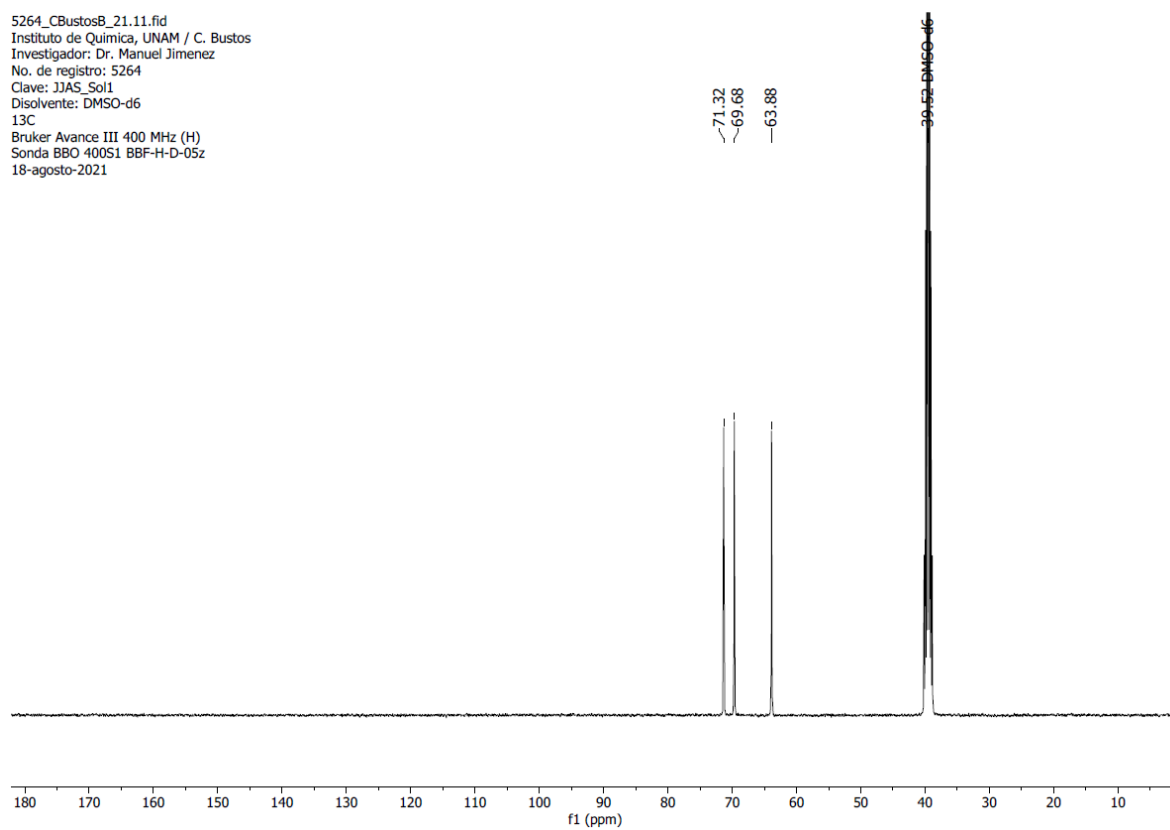
**Figure S2:** Chromatogram, FAMES from hexanic extract of *Padina gymnospora*

5264\_CBustosB\_21.10.fid  
 Instituto de Química, UNAM / C. Bustos  
 Investigador: Dr. Manuel Jiménez  
 No. de registro: 5264  
 Clave: JIAS\_Sol1  
 Disolvente: DMSO-d6  
 1H  
 Bruker Avance III 400 MHz (H)  
 Sonda BBO 400S1 BBF-H-D-05z  
 18-agosto-2021

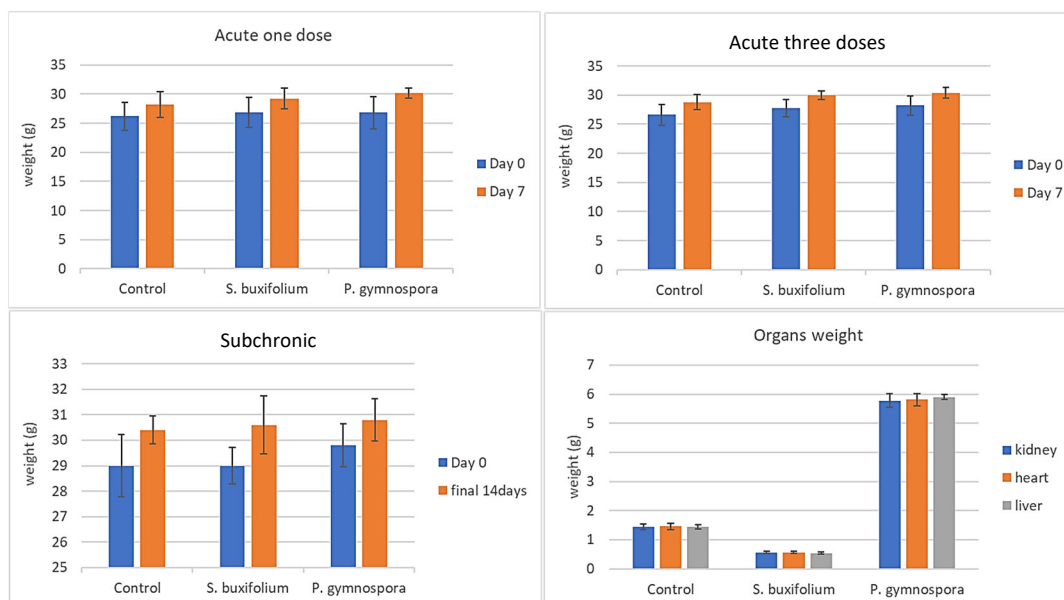


**Figure S3:**  $^1\text{H}$ -NMR spectrum of mannitol (DMSO-d6, 400 MHz).

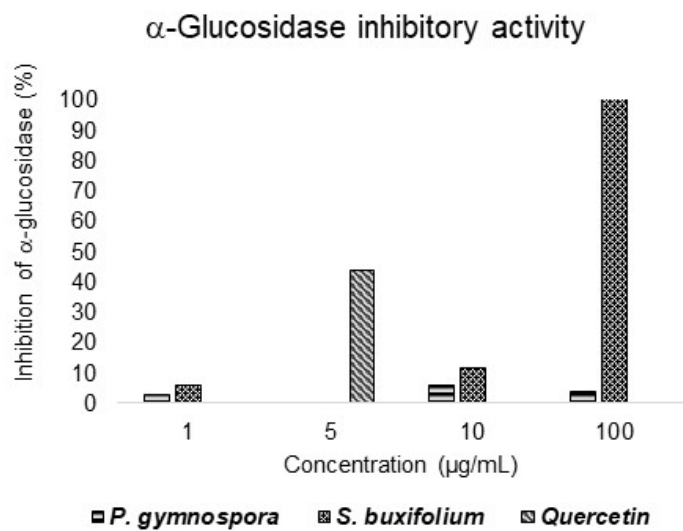
5264\_CBustosB\_21.11.fid  
Instituto de Química, UNAM / C. Bustos  
Investigador: Dr. Manuel Jimenez  
No. de registro: 5264  
Clave: JJAS\_Sol1  
Disolvente: DMSO-d6  
13C  
Bruker Avance III 400 MHz (H)  
Sonda BBO 400S1 BBF-H-D-05z  
18-agosto-2021



**Figure S4:**  $^{13}\text{C}$ -NMR spectrum of mannitol (DMSO- $d_6$ , 100 MHz)



**Figure S5: Toxicity**



**Figure S6:  $\alpha$ -glucosidase inhibitory activity of hexanic extract of *P. gymnospora* and *S. buxifolium***

**Table S1:** Effect of the acute oral treatment with *S. buxifolium* and *P. gymnospora*.

Group	Acute one doses	Acute three doses	Mice used	Number of mice died (7 days)	Number of mice died (14 days) Subchronic
Control	Saline solution	Saline solution	5	0	0
<i>S. buxifolium</i>	100 mg/kg	150 mg/kg (3 of 50mg/kg each)	5	0	0
<i>P. gymnospora</i>	100 mg/kg	150 mg/kg (3 of 50mg/kg each)	5	0	0