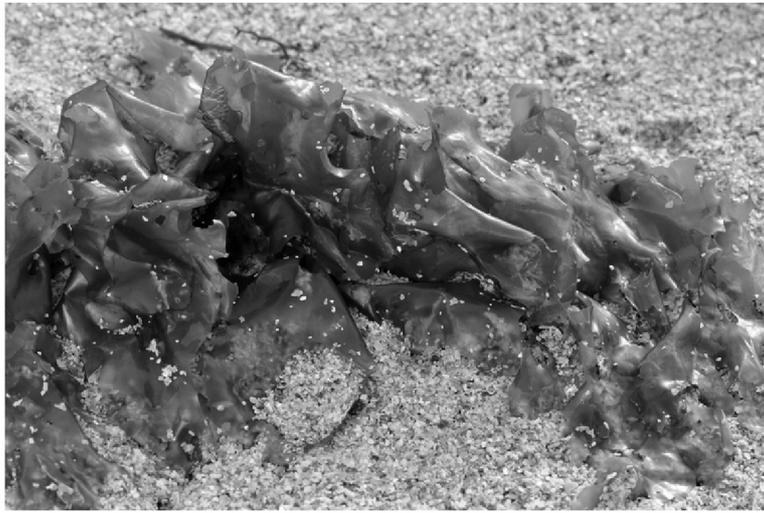


(c) The photograph shows green algae called sea lettuce (*Ulva lactuca*).



(Source: © Arterra Picture Library / Alamy Stock Photo)

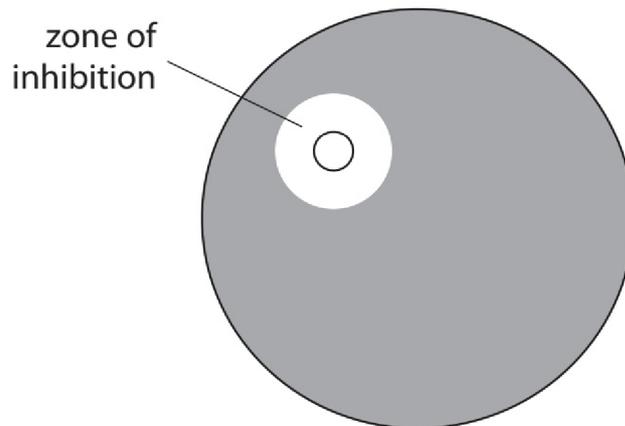
Sea lettuce contains chemicals called fucoxanthins that have antimicrobial properties.

The antimicrobial properties of these chemicals were investigated.

Discs containing fucoxanthin chemical were placed onto four agar plates each seeded with a different type of bacteria.

These plates were then incubated for 24 hours at 25 °C and the zone of inhibition measured.

The diagram shows the zone of inhibition.



The table shows the results of this investigation.

Type of bacteria	Mean diameter of the zone of inhibition / mm	Range / mm
<i>E. coli</i>	10.2	±0.72
<i>S. aureus</i>	11.1	±0.63
<i>L. monocytogenes</i>	6.0	±0.41
<i>P. aeruginosa</i>	7.5	±0.55