Investigating the role of primary producers in coastal H₂O₂ production

DO SEAWEEDS PRODUCE BLEACH?

Research question: How do primary producers in coastal systems contribute to H_2O_2 production, and how does this affect bacterial productivity?

Seaweeds are known to produce H_2O_2 during photosynthesis, but there has been little research into the role of seaweeds in coastal H_2O_2 levels. The wider ecosystem implications of H_2O_2 production by primary producers are not well understood.

In coastal systems, macroalgae and seagrass form dense habitats, with potential to produce H_2O_2 . This may impact bacterial productivity, which could have flow on effects to higher level organisms in the ecosystem.

We will measure H_2O_2 concentrations in seawater, production rates by primary producers, and the effects on bacterial productivity.

Seaweed

PHOTOSYNTHESIS

H₂O₂

Bacterial Productivity



Isla Twigg BAppSc (Hons)

