









Aquaculture



**Plant Nutrition** 



**Human & Animal Nutrition** 





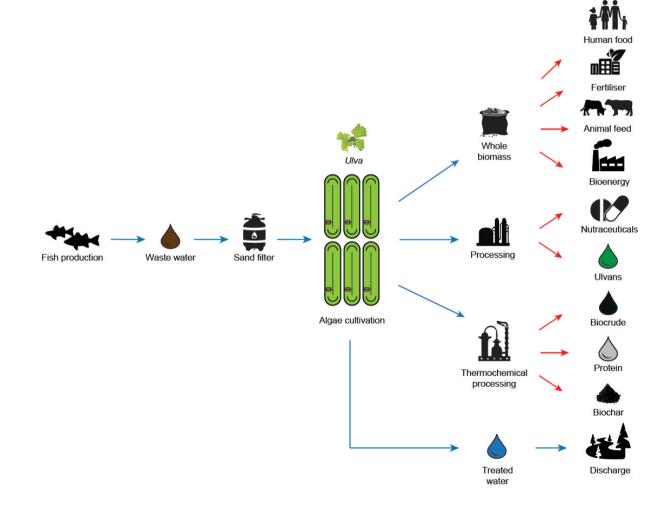


Bioremediation

Scale production of *Ulva* for bioremediation and bio-products

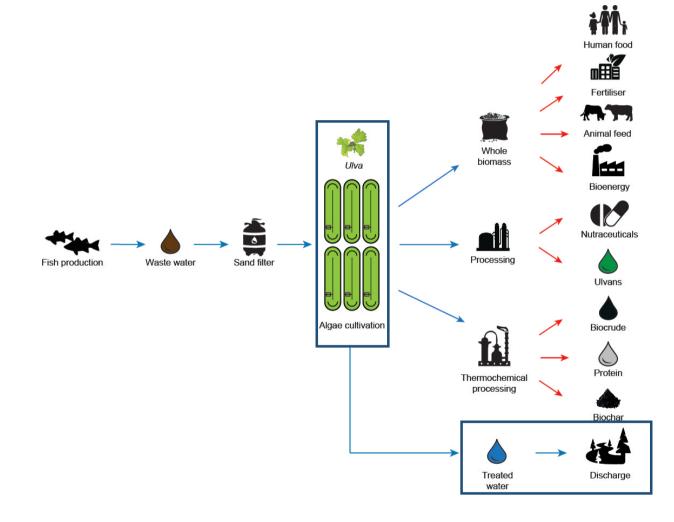
# The integrated culture of seaweeds in land-based aquaculture





# The integrated culture of seaweeds in land-based aquaculture





### Selection of species



Ulva ohnoi

Pan-tropical

High temperature tolerance ~35° C

High growth rate

Variance in growth between locations

Variance in growth within locations

Potential to select strains

TSV strain to perform at high temp – low salinity

Ulva tepida



### Selection of species



#### Ulva ohnoi

6 month intensive trial (13,000 L tanks)

1g (fw).L<sup>-1</sup> (7 days harvest)

38 g (dw) m<sup>-2</sup>.day<sup>-1</sup>

 $16 - 77 g (dw) m^{-2}.day^{-1}$ 

28° C optimum

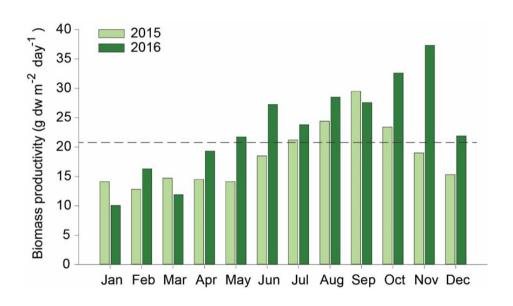
12% ulvan

13% protein

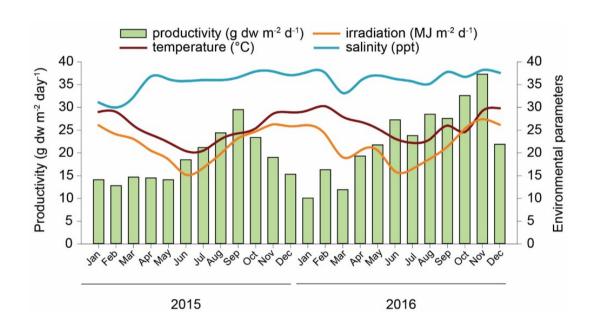












#### Pacific Reef Fisheries



### Existing farm

30 hectares of new production

New farm

Guthalungra

260 Ha site with 23 Ha of seaweed

- ~ 2500 tonnes of prawns
- ~ 1700 tonnes (dw) of *Ulva ohnoi*



Product development and value optimisation

# Alva Beach Facility – 200 m x 12 m x 0.35 m











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