Forecasting swordfish quality

A tool for dynamic industry adaptation

Kudoa sp. 5 μm

"Jellymeat"

5 cm

Image: A.J. Forrest

200 μm

Apex

10 μm   10 μm   1 μm
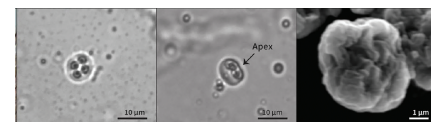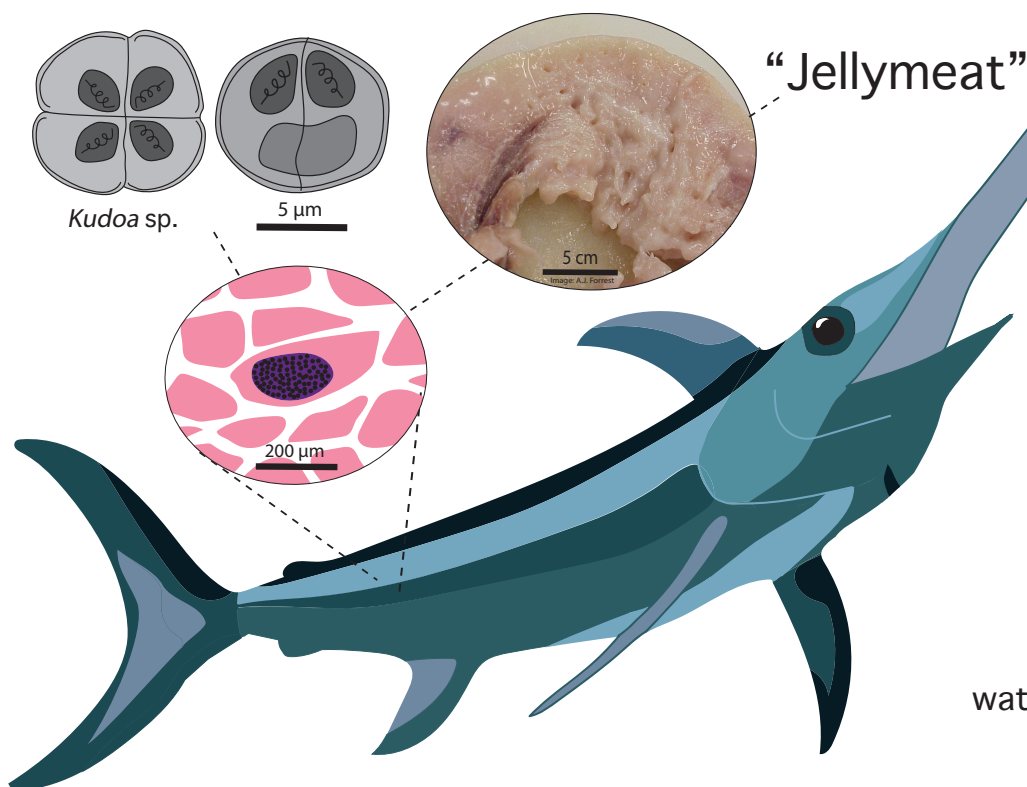
1 Infection by *Kudoa* sp. can cause "jellymeat" (post-mortem myoliquefaction) in swordfish. Fishers and seafood processors operating within Australia's Eastern Tuna and Billfish Fishery (ETBF) have reported observing "jellymeat" more often in summer, or when waters fished are warmer than usual

2 Model relationships between the prevalence/intensity of *Kudoa* sp. infection and ocean state throughout the ETBF

3 Create "jellymeat" forecasts for industry via an RShiny app, to help fishers avoid harvesting infected swordfish. This could:
(i) reduce potential for unecessary wastage of poor-quality swordfish,
(ii) maintain profitability, and
(iii) improve adaptive capacity of the industry to changing ocean conditions

Poorer to fish

JellyCast

Likelihood of harvesting swordfish infected with *Kudoa* sp.

Summer 2021

Better to fish

JellyCast

Summer 2021

Poorer to fish

Better to fish

Jessica A. Bolin
@JessieABolin
jessica.bolin@research.usc.edu.au

USC AUSTRALIA   CSIRO   WSA walker seafoods australia   4SEAS   BOM