



# SQUIDGY PRO RANGE and the S-FACTOR ATTRACTANT

by

Ben Diggles PhD

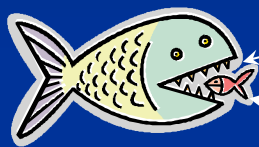
## Fishing lures – How do they work ?

- For lures to work they must both **attract** fish and **entice** them to bite
- Traditional lure designs emphasise visual attraction (size, shape, colour)
- Action is important (depth, frequency and amplitude of vibrations)
- Texture is also important for most species – why soft plastics work well
- Loud rattles probably less important due to efficient transmission of sound in water

## Attractants

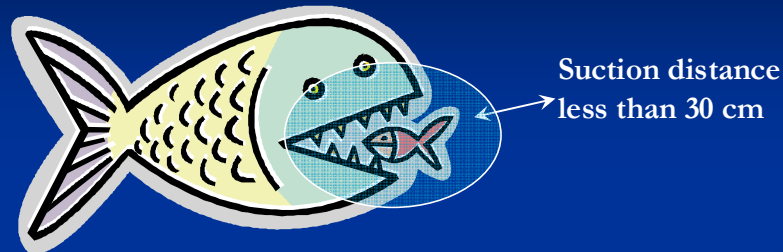
- Recent developments in lure technology have explored various attractants designed to **entice** fish to bite
- The attractants are designed to appeal to the fishes sense of taste and smell
- A better tasting lure is hit by fish more often, and held onto by the fish for a longer period of time = **increased hookups**

## Taste and smell in fish- smell



Scents can be detected from many hundreds of meters or even km away, provided the fish is downcurrent or downstream from the source

## Taste and smell in fish- taste



- Fish can **taste** the flavour of a food item **without having it in the mouth**, provided the item is close by (less than 30 cm or so).
- This is because some fish have taste buds outside their mouth. Also, all species pull water into the mouth while breathing.

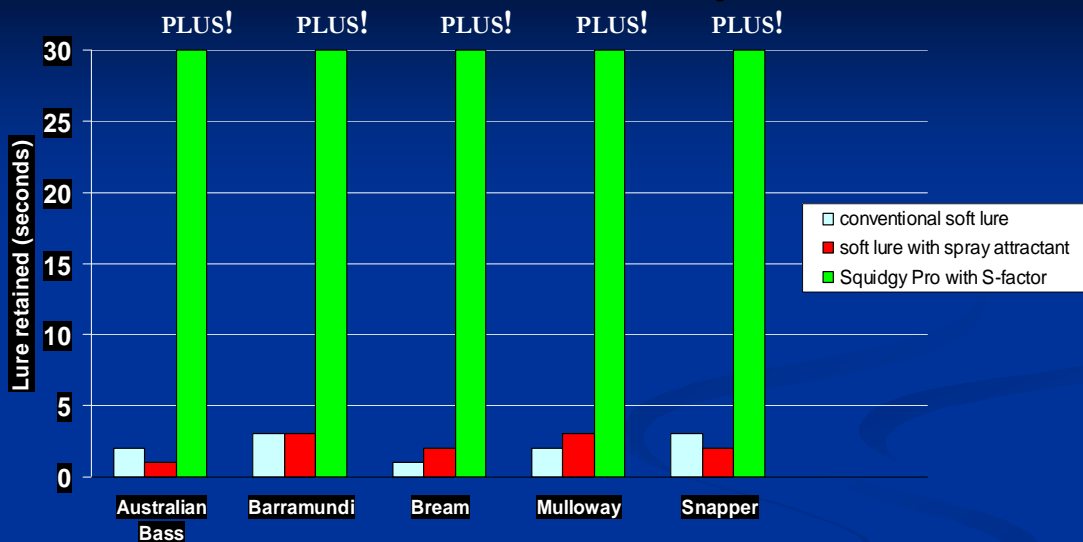
## Squidgy Pro Range and S-Factor

- Because taste and smell are so important to feeding fish, Squidgy undertook industry leading research with the aim to develop the most effective attractants for Aussie fish.
- The R&D was undertaken over a period of 18 months at Bribie Island Aquaculture Centre, QLD, by leading marine scientist Dr Ben Diggles
- The technologies used were borrowed from aquaculture feed programs designed to get fish to eat medications they don't normally eat.
- Thousands of hours of laboratory work was performed using bream, barramundi, Australian bass, snapper, mullet and several other species.

## What we found

- Its easy to develop fish repellents. The laboratory research showed that 95% of “attractants” on the market did not work. In fact, 75% were actually repellants for Australian species. Buyer beware.
- This is because fish have a very highly developed sense of taste. Their tastebuds respond to several specific water soluble compounds (not fish oils).
- The fish oil based products had limited effectiveness because they are not water soluble – these did not attract fish in laboratory tests
- “Pheromone” based products also ineffective - only products containing specific water soluble compounds were effective in enticing fish to eat foreign objects

## S-Factor – laboratory results



Results from laboratory trials examining retention time for conventional soft lures with and without attractant, and Squidgy Pro with **S-Factor**. Retention time for lures treated with **S-Factor** is over 30 seconds for every key Aussie species !

## Field Testing

- Laboratory testing was followed by rigorous field testing by the Squidgy team
- E.g. trials of **S-Factor** applied to PVC Squidgies outfished berkley gulps 9 to 1 when fish (black bream) were shut down
- Outstanding results on all species studied (snapper, bream, barra, Aussie bass, mullo way) and many others
- Care must be taken to avoid deep hooking when fishing catch and release

## Conclusion

- **S-Factor** is a result of a state-of-the-art scientific development process applying aquaculture based technologies to recreational fishing - a first for Australia.
- **S-Factor** is so effective that patents are pending
- Laboratory and field data from the **S-Factor** program show that effective attractants can significantly improve your catch rates when lure fishing