





Herbivores should eat herbs

- Use *only* live algae as the feed during *every* stage of rotifer production.
- *Never* use rotifer enrichment products





Larval rearing protocol

- Stock 130k turbot larvae 1 day after hatching(=d1)
- 1 x 10 cubic metre larval rearing tank
- Distribute survivors among more tanks from d9 onwards and move to weaning zone d25-d30
- End up with 40k commercial-quality juveniles at 10g individual weight by d100
- Commercial survival = 30%



Rotifer demand (1)

- 1 day before stocking larvae, add **1 billion** ($= 10^{12}$) *Isochrysis spp.* cells, **40 million** *B. rotundiformis* and **10 million** *B. plicatilis*.
- Rotifer pop'n rises to about **150 million** before larvae start feeding (d2) and keeps rising until d5 or d6.





Rotifer demand (2)

Only need to supplement with a further 250 million *B. plicatilis* before larvae are weaned onto Artemia (d10)

- Total demand for intensively-cultivated rotifers = 2,300 per larva stocked.
(= 7,500 per juvenile produced.)









Rotifer culture density

B. rotundiformis

- Pre-production
100-200 per mililitre
- Mass-production
250-650 per mililitre

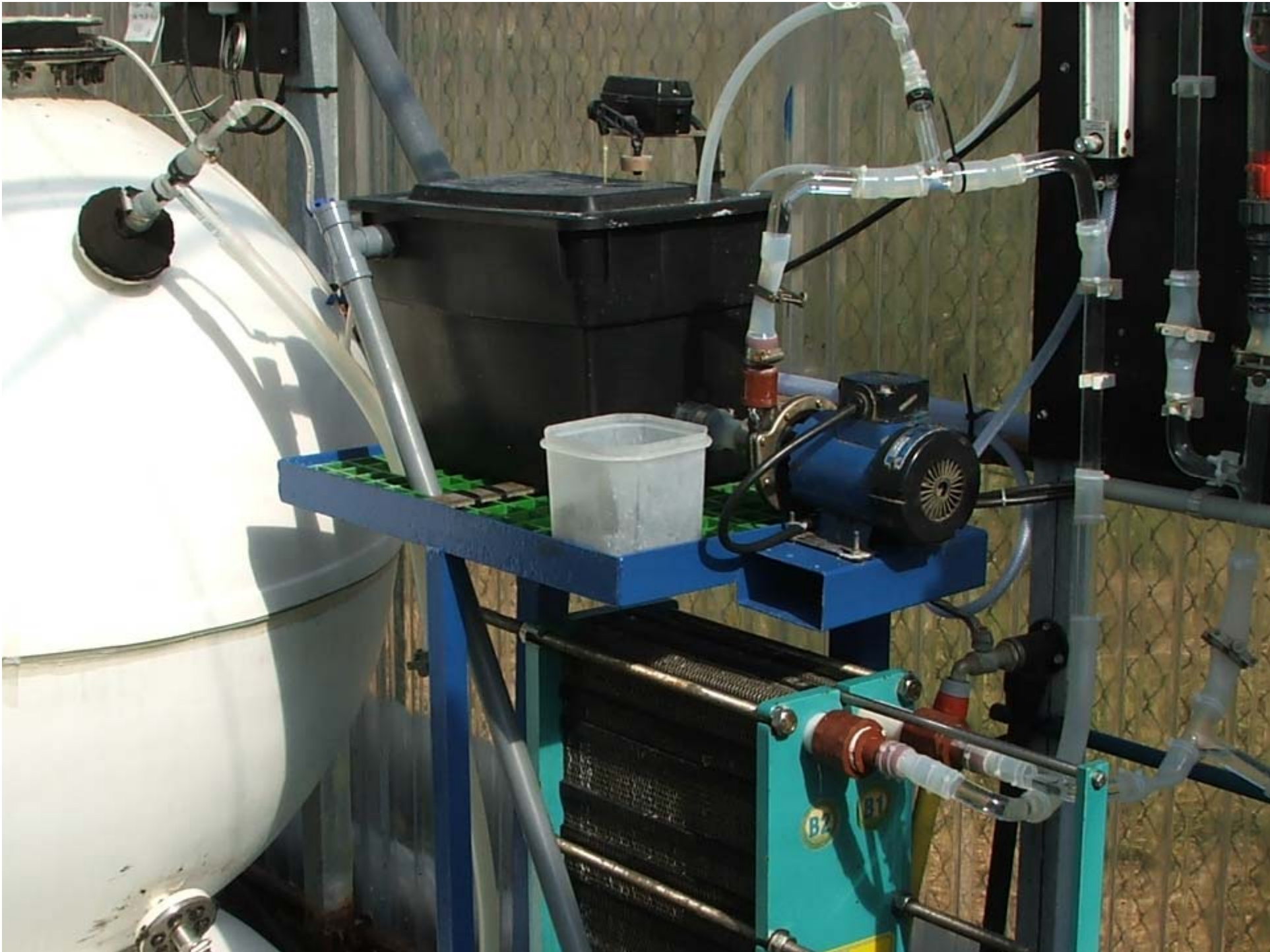
B. plicatilis

- Pre-production
50-100 per mililitre
- Mass-production
150-400 per mililitre











Total daily algal availability

- 13 billion (1.3×10^{13}) *Isochrysis spp.* cells or their equivalent in biomass. (“IE”)
- 8 cubic metres of algal cell suspension at 1,600 cells per microlitre

Algal consumption per culture tank

B. rotundiformis

B. plicatilis

500 litres / day

750 litres / day

= 0.85×10^{12} I.E./day

= 1.3×10^{12} I.E./day

= 8,700 I.E./rot./day

= 22,000 I.E./rot./day



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