



INCREASED MOISTURE OF PELLETED DRY DIETS IMPROVES SOLE GROWTH

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Introduction

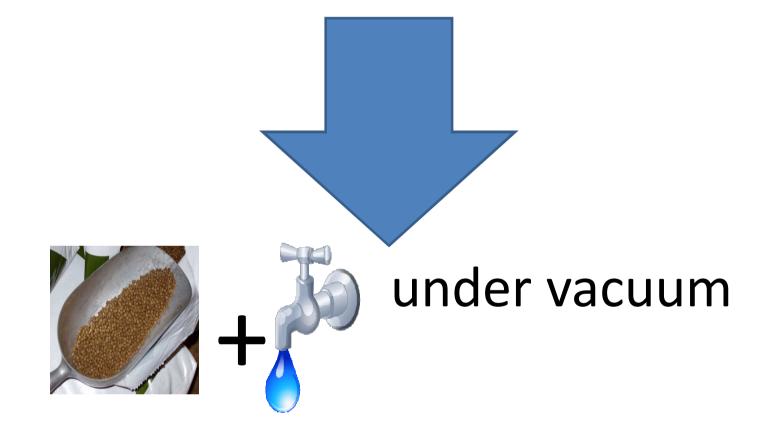
- Sole feed intake (FI) & growth rate (SGR) is far below potential
- Moist diets are more palatable
- If eating conventional dry feed (<10% water) then increase drinking rate imposing osmotic stress.
- Ingestion of dry feed imposes a net body water loss

Question

- Adding fresh water to feed
- Reduces osmotic stress?
- Reduces the need to moist the feed?
- Moisting standard pellets improves FI, SGR and FCR?

Hypotheses

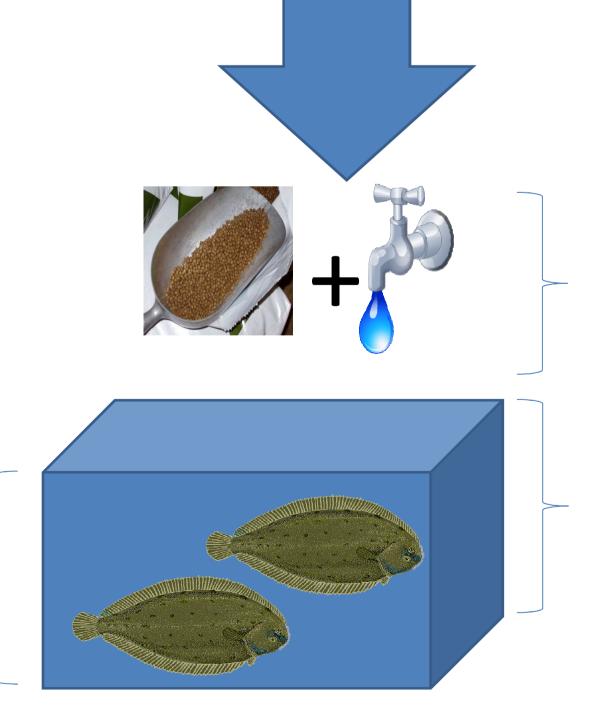
- FI, SGR, and FCR are different for moist pellets versus dry pellet
- Growth response differs in relation to moisture level



DANAEX 1562, 1.7 mm

Moisture content: 7%, 20%, 30%, 40%, 50%, 60%

In treatment 50 and 60% instable pellets were observed!



Fed ad libitum
Beltfeeder
20h/day
Feed recovery

6 tanks

4 subsequent periods

4 times weighing ind. biomass

70m³ recirculation system

2 V/h tank refreshment

•4 subsequent periods: adaptation period 7d, period 1 22d, period 2 & 3 21d

•Total experimental period 71d

Individual weight: 52g

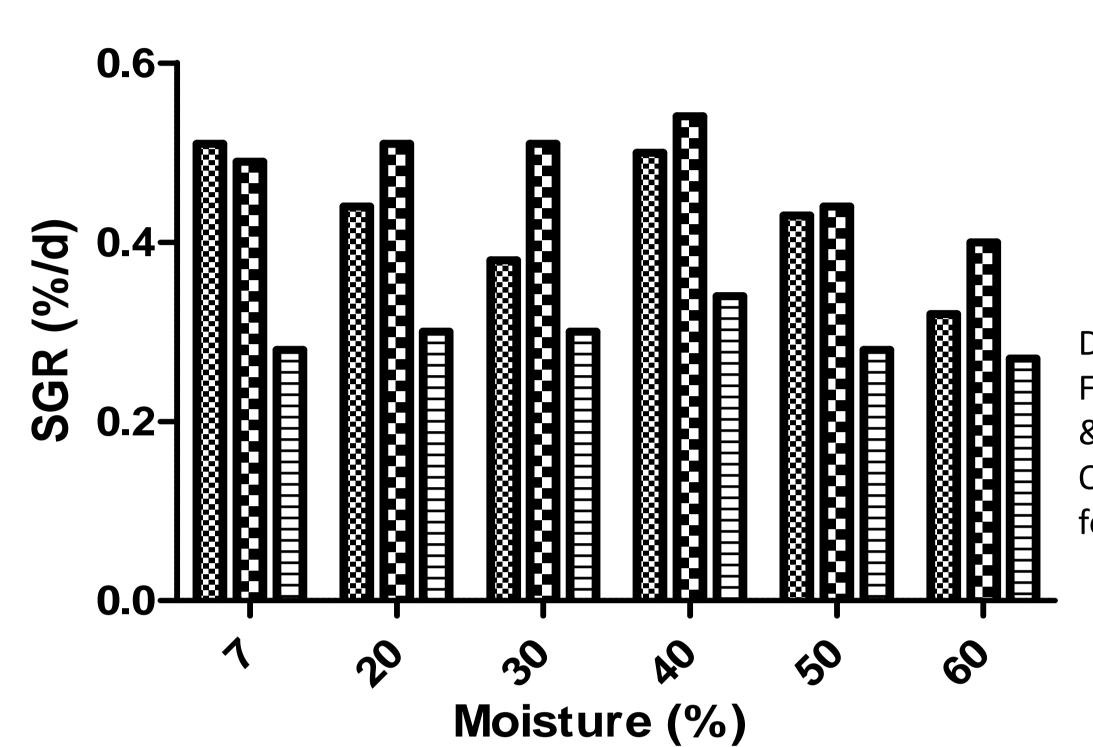
Stocking: 30 fish/tank

Temperature: 19-20°C

Density: 1.4 kg/m²

Light: 12L:12D

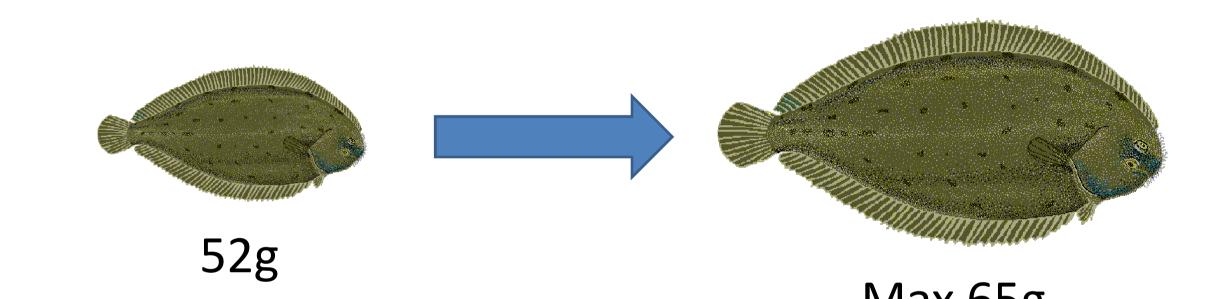
- •Formalin (200ppm) treatment in period 1& 3 due to parasites
- •Data analysed by 2-way anova for period & moisture effects on FI, FCR & SGR
- •No replicates = no post hoc test
- •Overall GLS model for all results of period 1-3
- •Relative values for FI, SGR & FCR were compared by 1-way Anova Repeated Measures

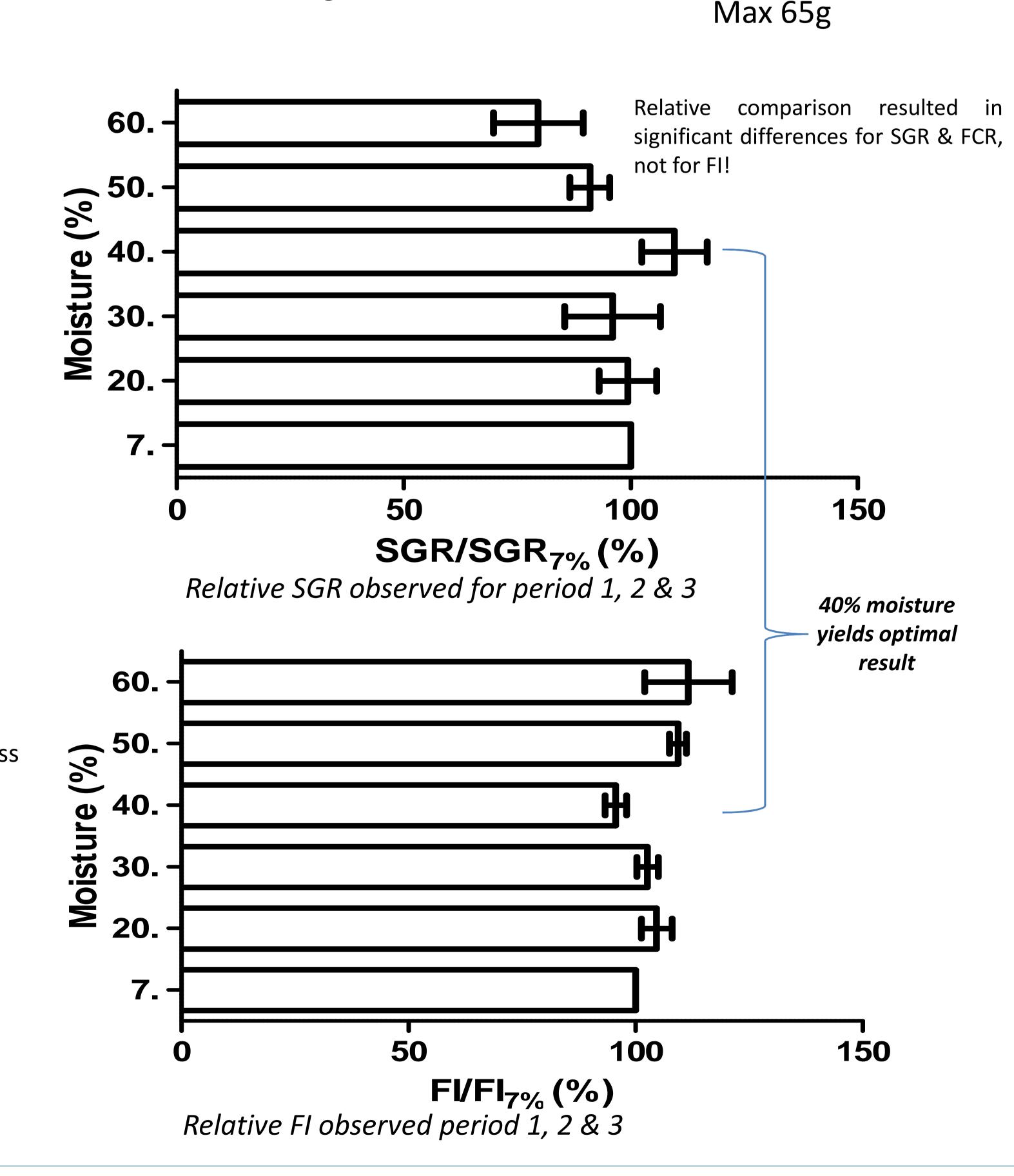


Period 1
Period 2
Period 3
Period 3
Differences detected for

FI, SGR & FCR for period & moisture
Overall model only trend for SGR (p<0.1)

Absolute SGR during period 1, 2 & 3





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