### Here Fishy Fishy: Aquaculture Systems

# Standard Laboratory Operating Procedure #202 Feed Intake Plan for Fish in Aquaculture System

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**General**: The objective of feeding fish is to provide the nutritional requirements for good health, optimum growth, optimum yield, and minimum waste. Nutrients essential to fish are the same as those required by most other animals. These nutrients include water, proteins (amino acids), lipids, carbohydrates, vitamins and minerals.

Safety: Wear proper PPE.

#### **Materials**

Growth Rate and Feeding Rates Chart Lab Notebook Blue or Black Ink Pen

#### **Procedure**

1. The feeding rates are only a guide but will help determine if the system is operating correctly. Use the calculations chart below to determine how much feed to give fish in aquaculture system:

Month	Start weight (g)	End weight (g)	Growth rate (g/day)	Feeding rate (% weight)
1	1	5	0.2	15 - 10
2	5	20	0.5	10 – 7
3	20	50	1	7 – 4
4	50	100	1.5	4 – 3.5
5	100	165	2	3.5 – 2.5
6	165	250	2.5	2.5 – 1.5
7	250	350	3	1.5 - 1.25
8	350	475	4	1.25 – 1.0
9	475	650	5	1

Resource chart from: <a href="http://rdaquafarms.com/Tips.html">http://rdaquafarms.com/Tips.html</a>

- a. Grams of Daily Feed = \_\_\_\_\_g of fish in system x % feeding rate
- b. If needed, convert lbs to grams (1lb = 454 grams)

**Example:** 75g of fish in system x .035 (from feeding rate %) = 2.625g of fish feed daily

2. Take the amount of grams of feed to give fish daily and divide by 3 since the fish need to be fed 3 times a day.

#### **Example from above:**

- 2.25g/3 times a day = .875g of feed per feeding time
- 3. Remember to observe the fish eating to help determine the proper amount of feed.

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