

# Fish Feed Quality Control

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# Fish Feed Quality Control

- Feed contract-our feeds are purchased using a contract/blanket purchase order, COTR for the program
- Feed sampling-standard practice to monitor a contract product



# AOAC Official Method 965.16, Sampling of Animal Feed

- Use slotted single or double tube, or slotted tube and rod, all with pointed ends (a trier).
- Use this probe to take a sample from ten bags on a randomly selected pallet
- Have ten subsamples that are mixed to make one composite while retaining a portion of the ten subsamples

*J. Assoc. Off. Anal. Chem.* **33**, 424(1950);  
**38**, 108(1955); **41**, 223(1958); **48**, 658(1965).  
*Feed Inspector's Manual* (1994) 1st Ed., Association of Feed Control  
Officials, Inc., Oxford, IN.

*Revised: March 2002*





# Reading the label can be helpful

- Label has the lot #
- Production date
- Feed type, size and composition

Pdt #: 11701625 Lot #: 4199032

Pdn Date: Nov 23, 2017

Best Before: 23-Nov-18

**BioVita Starter**

**#0 CRUM**

Complete Feed for Salmonids  
This feed contains added selenium at 0.1 mg/kg

#### GUARANTEED ANALYSIS

Crude Protein (min)	53	%	Crude Fiber (max)	1.0	%
Crude Fat (min)	18	%	Phosphorus (min)	1.2	%
Sodium (actual)	1.1	%	Vitamin D3 (min)	4000	IU/Kg
Calcium (actual)	2.6	%	Vitamin E (min)	350	IU/Kg
Vitamin A (min)	10000	IU/Kg			

INGREDIENTS: Fish Meal, Fish Oil, Wheat Gluten, Wheat Flour, Hydrolyzed Hake, Dried Whey Powder, Porcine Gelatin, Mono Ammonium Phosphate, A Vitamin/Mineral Premix Containing: Vitamin A Acetate, Vitamin D3 Supplement, Ascorbyl Polyphosphate C, Vitamin E Supplement, Inositol, Zinc Sulphate, Nicotinic Acid, Calcium Pantothenate, Manganese Sulphate, Riboflavin, Pyridoxine Hydrochloride (B6), Thiamine Mononitrate, Menadione Sodium Bisulfite Complex (Vitamin K), Copper Sulfate, Folic Acid, Calcium Iodate, D-Biotin, Sodium Selenite and Vitamin B12 Supplement, Lysine Hydrochloride, Vitamin E Supplement, Choline Chloride, Ascorbyl Polyphosphate C, Brewer's Yeast, DL Methionine, Astaxanthin and Ethoxyquin, a preservative.



Manufactured for:

Bio-Oregon

1140 Industrial Way, Longview, WA. 98632  
800-962-2001 Phone 360-425-6785 Fax

Net Wt. 20 kg/ 44 lb.

THIS PACKAGE IS TO BE SOLD AS A COMPLETE UNIT ONLY  
FEEDING DIRECTIONS: Feed as sole ration to salmon & trout



NFH Name:	NFH Contact Person:
Today's Date:	Person Who Collected the Feed:
Date of Feed Manufacture:	Feed Manufacturer:
Lot Number (if any):	Date Feed Received:
Type of Feed (for example, BioVita Fry	Size of Feed:



# Analyses performed on your feed

- Protein
- Lipid
- Moisture
- Ash
- Rancidity indicators-peroxide, free fatty acids, TBA





# Quality control at the hatchery

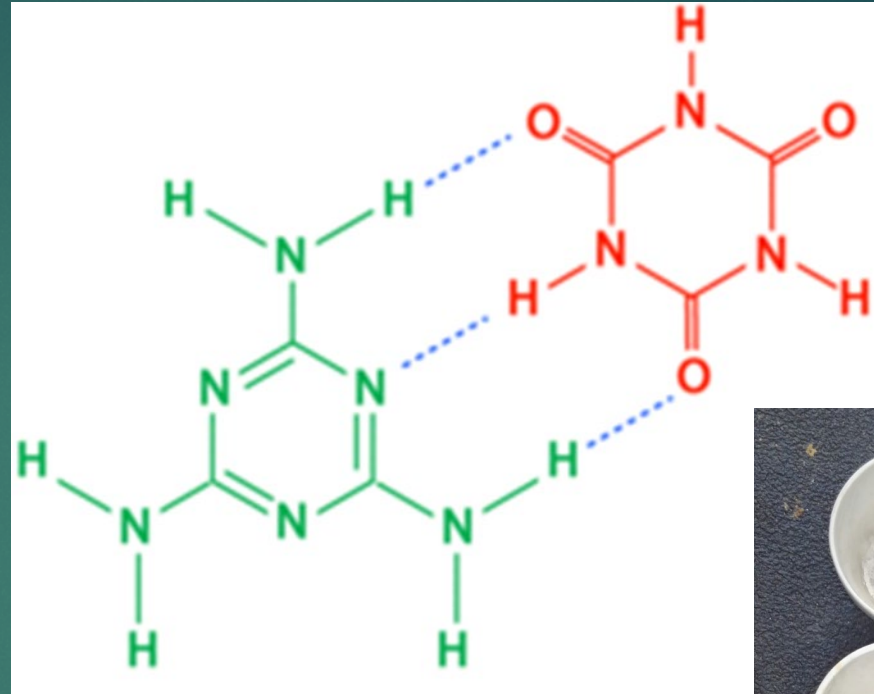
## Feed delivery check list

- Quantity ordered/quantity received
- Correct size
- Condition of the bags/boxes
- Moisture
- Mold
- Odor
- Fines or dust



# Feed issues

- Melamine
- Mysterious ash
- Rancidity





# Rancidity

- Rancid lipids
- Causes loss of antioxidants  
Vitamin C, Vitamin E, Selenium
- Sunburn or steatitis?
- Good feed storage critical





# Other feed issues

- Mold
- Damaged bags
- Medicated feed





Thank you

Questions?

