

Dear Sir or Madam,

Please allow me the opportunity to comment on the NOAA Aquaculture Program's Alternative Feeds Initiative. I have worked in the field of Aquaculture for fourteen years; six of which were directly associated with the research of Alternative Feed Ingredients for Aquaculture. I now work for the California Department of Fish and Game. My research began as a graduate student at Purdue University under the direction of Dr. Paul Brown. I later continue this research in private industry for a large Canadian Agricultural Cooperative (Saskatchewan Wheat Pool, Saskatoon, SK, Canada). My research included in-depth investigations of soy, corn, canola, pulse crops (i.e., field peas, faba beans), alfalfa and flax. Through this research I found the most promising area to be a dry processing technology known as "air-classification". Air-Classification is a common process that utilizes a wind turbine to separate particles for various purposes. I have found that this process, when utilized with very finely ground pulse crops (particularly faba beans) can produce a high quality protein concentrate. The process works well on many pulse crops because of the large size of the starch granules in these crops. When these crops are finely ground (pulverized), the air-classification process is able to separate the large starch granules from the small remaining non-starchy particles that are mainly composed of protein. The research trials that I conducted with rainbow trout revealed that both air-classified field peas (protein content 50%; commercially available) and air-classified faba beans (protein content over 60%) were able to replace a substantial amount of fish meal without reducing growth rates. What also appeared very promising was the fact that these concentrates were produced through a dry processing method and does not involve a wet process which would require substantial energy to dry the ingredients. I would be happy to discuss these ingredients with you further if you are interested.

Sincerely,

Paul D. Adelizi