

Floating, Sinking and Medicated Fish Feeds

Feed comprises about one half of the variable cost associated with catfish production. Understandably, producers are interested in knowing how much feed the fish are consuming. In addition to extra expense, water quality can deteriorate unnecessarily due to the addition of excess feed. Extruded, floating feeds offer the advantage of watching the feeding response as opposed to a sinking, steam-pelleted feed. Extruded feeds cost more to manufacture than steam-pelleted feeds due to the extra energy required and nutrients lost during the extrusion process. Extrusion involves the plasticizing and cooking of feed ingredients by a combination of pressure, heat and friction. Steam pelleting uses heat, moisture and pressure to create larger feed particles.

Recently, the question has been asked, "how much or what percentage of a floating feed should float?" When I asked Dr. Ed Robinson at Mississippi State University this question he responded that there is no industry standard, but typically 80-100% should float. Whether or not the feed floats does not affect catfish nutrition, but it does impact the grower's ability to determine how much feed is being consumed during feeding. Not surprisingly, most growers prefer floating feeds where the highest percentage of pellets float. In past years, floating and sinking feeds were mixed to reduce feed costs. Sinking feeds are still used to feed catfish during cool water temperatures.

Romet (sulfadimethoxine-oretoprim) is added to catfish feed for the registered control of the bacterial disease ESC (enteric septicemia of catfish). Romet has been found to be effective in the treatment of *Aeromonas hydrophila* and systemic columnaris bacterial diseases as well. This feed is fed to satiation for 5 days. There is a three day withdrawal period before fish may be processed or sold live for human consumption. Terramycin is added to catfish feed for the registered control of bacterial *Aeromonas* infections. Similar to Romet, terramycin may also be effective in treating ESC and systemic columnaris infections. Terramycin has traditionally been available only in sinking pellets. Apparently, there is now a "cold" extrusion process which does not break down the antibiotic during the feed milling process and terramycin may be available in a floating feed. Terramycin must be fed for 7-10 consecutive days with a 21 day withdrawal period before fish may be processed or sold for human consumption.

Medicated feeds may be expensive to buy and have shipped in small quantities. Similar to any fish feed, they can only be stored for limited periods of time. Obviously, the feeds will only work if the fish are still feeding well and are suffering from the bacterial infections mentioned. There are strains of these bacteria that are resistant to both medications. Contact Tim Kohl or myself at 247-2334 to discuss medicated feed as a treatment option for your fish.