

# A Feeding Revolution?

David E. Boruchowitz

(Photos, data, and information courtesy of Pablo Tepoot, New Life International, Inc., <http://www.nlpublish.com/index.html>)

*For this last technology we're highlighting this month, we feel the need to begin with some disclaimers. First, we repeat that we are not endorsing New Life Spectrum foods as better than any other foods. We are not even saying that the claims made by these products are true. The whole reason we're bringing this information to our readers is that we find the philosophy behind the formulation of this food intriguing, and we feel that its endorsement by so many prominent aquarists warrants a close look at it. Many of the standard guidelines for feeding aquarium fish are trampled by New Life foods, which indicates that there might just be a revolution in the wings here. We expect that, as with any technological revolution—undergravel filtration and the science of biofiltration being a perfect example, the extent and ramifications of the changes will be varied and widespread, and that controversy will hound this technology forever. Who could have predicted wet-dry filters or live rock filtration from the humble little plastic-tube filters that started it all? Likewise, who knows what effect, if any, the arrival of this new type of food will have? All we're sure of is that it's interesting, and it's only likely to get even more so.*

**P**ablo Tepoot of New Life International has been quietly brewing a tempest in the sea of tropical fish foods for a while now. Some aquarists hail New Life Spectrum food as the greatest thing in the hobby since silicate glass. Some people see Pablo's product as just another fish food, and his claims as unsubstantiated. Rather than get caught in this controversy, let's concentrate on the food itself and take a look at what's different about its formulation.

The first thing that attracted my attention to this food was the claim that it was something different. Always eager for news to pass on to our readers, I began talking to Pablo when he approached me at a trade show. As I listened and looked at his videos and other evidence, I realized that while *TFH* could not do the exhaustive testing necessary to see exactly how revolutionary this product was, our readers could. Then when we got the idea to highlight

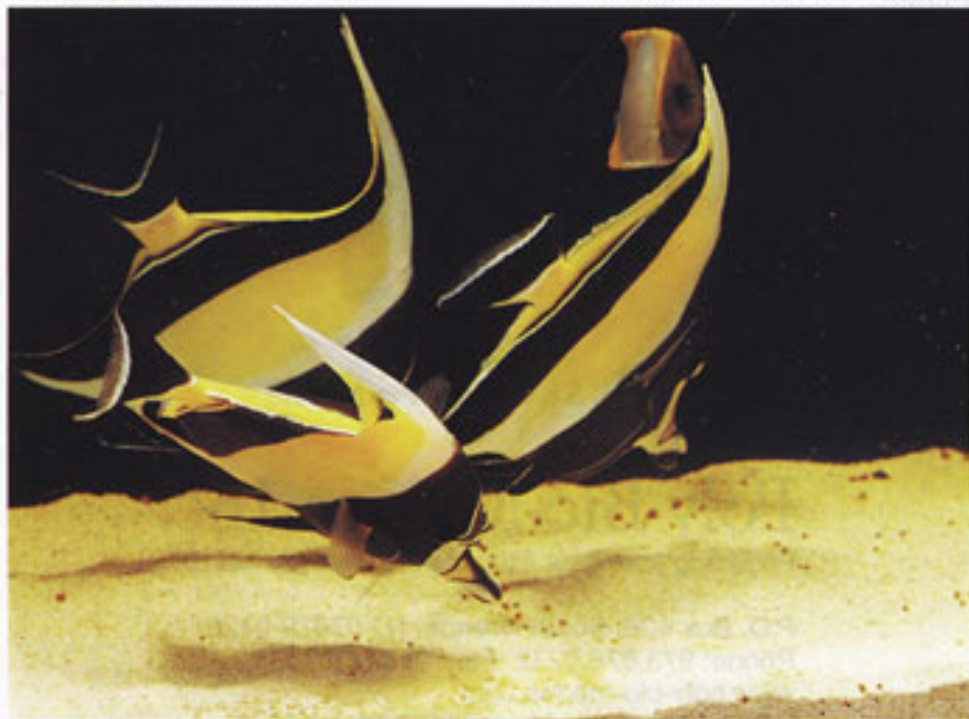
some new and potentially very significant technologies in the January 2003 issue, it was obvious we should include this one.

## It's in There

The first thing you'll notice about this food is that it belies the traditional advice to feed a varied diet. This food is supposed to be fed exclusively. The reason to stress a diet of lots of different foods is that nutrients missing from one food will be found in another. Most fish eat a variety of food items in the wild, which leads to the conclusion that it's best to feed a variety of food items in the aquarium. The idea that led to the production of Spectrum foods, however, was to research the nutrient needs of fish and then formulate a food that contained them all. Perhaps easier said than done, this overkill approach is one logical solution to the problem of feeding tropical fish in captivity.

Traditional wisdom, of course, bristles at this. One food for all fish? One formulation for marine and fresh? Herbivore and carnivore? Grazer and predator? How is that possible? Mention

Fat and healthy, these long-term captive Moorish idols are feeding eagerly on the pelleted food.



a nutritional need, and Pablo says, "It's in there." Mention another, and he says, "It's in there." Mention a nutrient needed for full color production, "It's in there." A nutrient whose absence is implicated in disease, "It's in there." A trace mineral, "It's in there." A food that increases vitality, "It's in there." Seaweed that's vital to tang nutrition, "It's in there." A food that stimulates spawning, "It's in there." A nutrient that boost immune response, "It's in there."

His overkill approach is readily exemplified by his Thera-A formulation, recommended for fish infected with parasites. This is not a medicated food, but one rich in the benefits of garlic. The amount of garlic included was based on research into clinical tests of garlic as a parasite control; Pablo did not include the amount determined to be necessary but instead used significantly more. Since garlic is a food, not a drug, this overkill philosophy runs little risk other than leaving the fish in need of a breath freshener. The pungence of the container when you open it testifies to the strength of the product!

## Natural Color

New Spectrum's all-in-one approach does not mean a list of artificial ingredients. The idea instead is to combine exactly all those things that fish are eating in the wild. A special emphasis is placed on the absolute avoidance of hormones. After all, hormones can bring out colors on a female guppy, but they'll render her sterile, too! Aquarists have known for a long time that a fish's coloration (especially red pigments) can be very dependent on nutritional factors, since much of a fish's color comes from color components ingested by the fish. For example, feeding shrimp and krill to enhance yellows and reds is a time-honored practice in the hobby.

Pablo provided us with data and



**Above:** In this closeup you can see that the fish is not at all emaciated.

**Below:** A wide variety of species feeding eagerly on New Spectrum food.

photos from a recent feeding trial in which *Lamprologus leleupi*—fish notorious for variation in color—were divided into groups in separate 10-gallon tanks, and each group was fed a different prepared food. I am impressed by the objectivity of this report, which, while it does indicate the superiority of New Life's formulation in speed and extent of color enhancement, notes that some other formulations also provided very favorable results. The

results of feeding Spectrum to these fish are very impressive. Equally telling are photos of some brilliant blue and glowing red discus that were fed Spectrum exclusively.

## Single Diet?

But what about fish eating just one food? No matter how nutritious it is, don't the fish need something else? And, no matter how good it tastes, don't they need the spice of variety?



A study comparing different fish foods found quite a difference. These fish were randomly assigned to the experimental groups and have both been in the study for 20 weeks. The upper fish was fed New Life Spectrum, while the lower fish received a color flake food.

We all know how fussy certain fish are about what they will deign to eat, while others are regular gluttons. Some species are so specific in their choice of food that they literally starve to death in captivity. One notorious example of this is the Moorish idol (*Zanclus* spp.). Pablo, however, has some Moorish idols that feed frenziedly on his food. Despite the fact that they have been fed nothing else for more than a year, they act toward the food the way most fish only behave when fed live foods. It appears the stuff really tastes good.

Typically idols are emaciated when you see them in an aquarium, but Pablo's fish are...well, fat! In fact, he has photos and videos of specimens of several species noted for their inability to survive in captivity that are plump, sassy, and chowing down on his food like little piglets.

## If They Eat It, They'll Live

Moorish idols aren't the only hard-or-impossible-to-keep fish that Pablo has maintained long term. His loyal customers expand the list of species even further. He is fond of saying, "If they eat it, they'll live," meaning that

if a fish can be induced to take the prepared food, the food will sustain the animal in good health and color for a prolonged period of time. It would be interesting to see this claim tested in some other really difficult cases.

## Possible Benefits

That idea makes me think of ways in which this product might be tested to the limit. There are fish like mandarins that never thrive, even when they can be trained to accept various foods. As of now, cleaner wrasses *Labroides dimidiatus* are simply not suitable for aquarium life; mandarins (*Synchiropus*, *Pterosynchiropus*) are suitable only for very large, very established reef setups; and seahorses (*Hippocampus* spp.) are iffy in most cases. There would be a true revolution in the marine hobby if 1) these fish could be trained to take this food and 2) they actually thrived on it the way other species do when they eat it.

That, however, is wishful thinking, and perhaps unattainable. Nevertheless, it is clear that there are cases in which this food may be a resource in turning heretofore off-limits fish into animals that the average aquarist can keep. In

fact, there is an inherent challenge to all fish food manufacturers in this—research into the cues which elicit feeding in wild-caught marines might suggest ways in which prepared food, which is already nutritionally adequate, can be made acceptable to hard-to-feed specimens. After all, no matter how miraculously nutritious a food is, if a particular fish won't eat it, it's of no value in keeping that fish.

## Two More Considerations

The adage suggests putting money behind mouthing off, and Spectrum foods come with an impressive money-back guarantee. Such a warranty obviously takes a lot of the risk out of trying a product.

In addition, the testimonials that these products have garnered are not just from Joe and Jane Aquarist, but also from some of the top names in the trade—renowned hobbyists, accomplished breeders, and respected wholesalers. Many are people I know and respect personally, and whose word alone makes me stop and consider carefully.

## Potential Drawbacks

I wouldn't be honest if I didn't admit to reservations about this obviously beneficial food—a couple, in fact. First is a worry about the suitability of this food as an exclusive diet, though I am amazed by the actual videos I've seen of fish in such a regimen. The second is related and is based on the biological difference between herbivores and carnivores in terms of the shape and structure of the digestive tract.

Even with all the necessary nutrients present, nutrients which are normally ingested in vastly different proportions are known to cause problems—for example, the presence of too much high-protein meat in the diet of algivorous cichlids. I am enough of a scientist, however, to realize that much scientific wisdom today began as the heresies of another time. Faced with evidence suggesting I may need to



**Top to Bottom:** This is a photo of a *Lamprologus leleupi* after 20 weeks on New Life food; This is a *Lamprologus leleupi* after 18 weeks on New Life food; This fish was 20 weeks with a third prepared food; This *leleupi* is shown after 20 weeks on yet a fourth brand of food.



alter my perceptions, I am willing to pursue the matter. I feel that there is enough evidence to warrant further investigation, tempered with caution. After all, the proof is ultimately in the pudding.

## The Reader's Role

That's where you come in. Even if tropical fish nutrition were the kind of research topic that engendered copious grant monies, there aren't enough laboratories to carry out all the necessary testing. On the other hand, there are an awful lot of aquarists out there, and the combined and cumulative knowledge hobbyists can acquire has the necessary scope to evaluate products like Spectrum fish food. The fact that many aquarists already swear by their favorite foods may actually be a benefit. Such things complicate the data, but they make for much more interesting evaluations.

I guarantee that even if every single aquarist tried this food, and if every one of them found it to perform as claimed, that there would still be people who would decide not to use it. There isn't a person, place, or thing in this world that can please all people equally. Many aquarists, however, might find this product useful in some form or another, in some application or another. As always when we bring product news to our readership, we encourage both experimentation and documentation—let us know your results, and we'll pass along any major news that may modify our position at this time and place. And if you're a manufacturer with documentation to suggest that you have a product that defies current wisdom and/or has the potential to effect a major change in the aquarium hobby, well, I'm as close as [editor@tfh.com](mailto:editor@tfh.com). 🐟