

INTERVIEW: New Generation of Organic Selenium to Hit Global Markets

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6 May 2014 - The use of organic selenium in animal diets has gained momentum in recent years. Organic selenium has been proven superior in a large share of animal trials and is nowadays used in a broad range of animal diets and for a several animal species, and this on a global basis.

The use of organic selenium is common practice today in both ruminants and monogastrics with specific attention to diets for animals in reproduction phase, like sows and poultry breeders. Organic selenium is also beneficial when it comes to meat quality as it is seen to enrich animal products with selenium.

The traditional way of supplying organic selenium is in the form of selenized yeast. However, there is a limitation to selenized yeast. This lies in the fact that only part of the selenium is in the form of L-selenomethionine, which is the actual effective organic form.

To tackle this issue, Orffa and Excentials are launching Excential Selenium4000, a new form of organic selenium, which guarantees all selenium in this effective organic form. Orffa and Excentials guarantee that for the same amount of total selenium, this new product provides the double amount of effective organic selenium in the feed.

Feedinfo News Service spoke to Marc Rovers, Central Technical Manager at Orffa, to find out more about the novelty of Excential Selenium4000 and what his company's expectations are for the "new generation" product moving forward.

Rovers explained that by showing no variation in concentration; and that all selenium in is in the form of effective digestible organic selenium, Excential Selenium4000 offers the lowest cost price per unit of effective organic selenium as a result of this superior bioavailability.

Other organic selenium producers have made similar claims in the past. However, Rovers argues that Orffa's use of the term "new generation" is more than marketing speech and is backed by science.



Marc Rovers
Central Technical Manager
Orffa

"Selenized yeast is a proven concept and was the first step of organic selenium nutrition. But animal nutritionists are aware that L-Selenomethionine in selenized yeast is limited. Excential Selenium4000 is a new step forward and therefore considered as the new generation of organic selenium", adds Rovers.

Orffa's Central Technical Manager stressed that several producers have registered selenium yeast products for the animal nutrition market today. However, the level of selenomethionine in these products is limited.

It is well understood that selenomethionine is the effective organic form in the metabolism. Selenomethionine enters the methionine pool and can be incorporated into body proteins. Via this way selenomethionine is able to build up selenium reserves in the body. However, all other forms of selenium in selenized yeast are first reduced to generate hydrogen selenide and follow the same pathway as inorganic selenium. Therefore the remaining part of selenium in selenized yeast is not considered to be more effective than inorganic selenium. Only the L-selenomethionine in selenized yeast is the effective organic selenium

"In Europe, the level of selenomethionine in these products has to be minimum 63% according to legislation. In theory the levels could be higher, but from published reviews on commercially-available products it can be concluded that most products are around this level, with some variations between different samples", explained Rovers. "In addition to selenomethionine levels, we also have to consider that yeast is not 100% digestible. If we take into account the digestibility of yeast (estimated at 80%), it can be suggested that the amount of effective digestible organic selenium is around 50%. Excential Selenium4000 holds 100% of its selenium in effective digestible organic form".

Rovers highlights the intensive trial work undertaken by Orffa in laying hens and dairy cows "The amount of selenium in milk and eggs is a good indicator for the selenium status of the animal, and this way the bioavailability of selenium sources can be evaluated", he said. "Selenium was supplemented at the same dosing, but in three different forms, being inorganic (sodium selenite), selenized yeast or Excential Selenium4000. By Supplementing selenized yeast it was possible to transfer more selenium to the eggs and to the milk compared to inorganic selenium. These trials demonstrate the higher bioavailability of selenized yeast above inorganic selenium and the superior bioavailability of Excential Selenium4000 over selenized yeast".

The market launch of Excential Selenium4000 is an outcome of Orffa/Excentials's New Business Development department. According to Rovers, this department within his company constantly explores new ideas and concepts. New concepts are tested in-depth before they are selected and eventually launched into the market. Moreover, Orffa works in close collaboration with leading universities and research institutes throughout Europe in order to analyze and test products for efficacy and beneficial effects in animal feeds.

"Innovation is an essential characteristic of our strategy. New ideas and products are traced and discussed in internal innovation meetings, and external scientific and industry experts act as a sounding board for the withheld ideas", he commented.

Earlier this year, Orffa obtained EU approval for the use of Excential Selenium4000 in all animal species. The approval is seen as a very important step forward by Orffa and a confirmation of Orffa's work on quality, safety and efficacy recognized by EFSA and the European Commission.

Excential Selenium4000 is now authorized in Europe as a nutritional feed additive for use in all animal species. For Rovers this development opens the doors to the European market and it will provide a solid basis for the global development of the product.

Excential Selenium4000 will be produced in Europe. And, within Europe, the product will be marketed via Orffa. However, the company is planning a global roll-out and will launch the product outside Europe via the Excentials network.

"Excentials is the global vehicle to export Orffa's unique business model and offers specialty feed additives and nutritional solutions for markets outside Europe. Via direct customer contacts and a broad distribution network", said Rovers. "Excentials will introduce the product in the key animal feed markets in North America, South America, Middle East, Asia and Russia".

Based on the market feedback so far, Orffa/Excentials foresees a high interest for Excential Selenium4000. And when asked if the company is ready to invest in more capacity should demand for the product rise, Rovers said that from a production and logistical point of view, all is in place to follow that interest and to serve customer needs globally.

"The use of organic selenium in animal nutrition has been well-established over the last decades and we are convinced that this will grow even more in future", stated Rovers.

"On the one hand, there is a continuous demand for the optimization of animal health. Selenium plays a crucial role in maintaining an optimal antioxidant status and immune function. On the other hand, there is an increasing demand for selenium-enriched animal products like eggs and milk, especially in the selenium-deficient regions of the globe", he added.

With the introduction of Excential Selenium4000 on the global market, Orffa is convinced that new possibilities will arise for animal nutritionists to provide organic selenium in an even more effective and cost efficient manner.