

Nicola Tallarico, Global Category Manager Adisseo

Supporting customers in optimising the use of methionine sources

Nicola Tallarico, GCM Rhodimet AT88 at Adisseo, offers some insights into the general methionine market and explains how Adisseo is partnering with its customers to get the most out the use of methionine sources in animal feeds.

BY ADISSEO

Q: Can you give us a general overview of the global methionine market and the position of Adisseo in it?

A: Methionine is a limiting amino acid in all animal feeds, so its annual consumption is directly linked with the increasing feed production needed to satisfy the growing human demand for animal protein. The methionine supply is primarily represented by two sources: DL-Methionine in powder form and DL-Hydroxy-Methionine (OH-Met) in liquid form. If we take a look at the market evolution in recent years, we can see a significant increase in the use of OH-Met, with average annual growth in double digits. Most suppliers produce only one of the two sources of methionine but Adisseo is unique in that it produces both sources of methionine at its production facilities, which are strategically located in France, Spain and China. This allows us to differentiate which source of methionine to offer according to each customer's needs. However, if we look at the specific segment of feed millers, we register an increasing willingness to switch from the use of powder methionine to the source in liquid form. Adisseo has continued to invest in the production of Rhodimet AT88 to match this growing market demand. More than 30 billion broilers worldwide are fed with an Adisseo source of methionine in liquid form each year.

Q: Why are more players switching to the use of the Hydroxy-Methionine?

A: The reasons could be different for each customer and can vary

from easier handling and storage of this source of methionine in liquid form, to precision in its application along with various other benefits. Some examples are the efficiency obtained when the full matrix value of the OH-Met is applied in feed formulation, or the improved pelleted feed production process linked to the addition of this liquid product. All these advantages are nowadays easier to prove thanks to increased knowledge acquired on OH-Met nutritional and application benefits.

Q: Can you add more details on this last aspect?

Adisseo, as a producer of OH-Met, has and will continue to invest a significant amount of resources in research projects via trials carried out in our internal research centre and also in cooperation with the most reputable universities and research centers across the globe. Our research and innovation team is constantly investigating the innovative benefits linked to the use of the OH-Met, as well as its pure nutritional value in various species. This knowledge is then shared with our customers in different ways. First of all, all the expertise acquired is collected in our Methiopedia, a technical reference book split into six chapters reporting what is known about the characteristics/features of the various sources of methionine and their application in animal nutrition. The second way is via delivering scientific talks at the main conferences on animal farming and nutrition, organising specific communications (webinars, magazine articles, newsletters, etc.), and publishing the trial results in high-quality peer reviewed scientific journals. Last but not least, all this information is converted into technical



Profile

Nicola has a PhD in layer nutrition and spent the first part of his career at Department of Poultry Science of the University of Bologna. Later on, he moved to the animal feed additive sector taking up various technical/commercial roles and at the beginning of 2022 he joined Adisseo as Global Category Manager for Rhodimet AT88 to support the continuous increasing use of this source of methionine in liquid form.

material and shared with our prospects/customers thanks to the activities of more than 200 regional experts in individual customer meetings.

Q: Does the company provide any other support to customers on the best use of liquid OH-Methionine?

A: At first, we need to start from the correct and uniform incorporation of OH-Met in animal feed and to do so, the company has implemented its specific program DIM (Design, Implement and Monitor). Following it, our experts on product application guide each customer from the identification of the best application system for their reality, to the correct installation and calibration, till the validation of each system functionality over the time. We can also support on the way to precisely determine the inclusion rate of methionine sources and optimise each feed formula. For this purpose, Adisseo offers a series of collateral services (listed below) to help nutritionists during their formulation process. The company has implemented a wide range of in-house or validated external laboratories to support our customers worldwide.

PNE: A unique online service based on NIR technology to predict the nutritional quality of the various raw materials. Customers just need to upload the NIR spectra of a specific raw material and they get their customised results in a few seconds. The main dietary ingredients are continuously updated by calibration models and we use them to predict in real time the multiple characteristics of

nutritional quality, using a reliable system based on *in vivo* data. **Adict:** A 'calculator' transforming the analytical results into nutritional values that are ready to use in formulation software. This gives customers the opportunity to easily, quickly and precisely integrate PNE data into feed formulation software. The values for each raw material are derived from analytical sources (PNE or other labs). Adict calculates missing nutrients thanks to equations of Feedipedia, a well-known global database. The process is as automated as possible, avoiding the potential for mistakes caused by manual input.

Nestor: An online service on which nutritionists can find the nutritional values of a wide range of raw materials. Our database is built thanks to the huge number of records of the NIR service (PNE). But more importantly, Nestor offers a flexible tool to determine the nutritional recommendations for poultry and pigs, particularly their needs in terms of metabolisable and net energy, digestible amino acids and minerals (phosphorus and calcium). Its flexibility makes it possible to determine these requirements using some pre-fixed parameters, such as feeding phase and performances objectives, as well as adapting these to specific rearing conditions.

All these actions and services demonstrate that Adisseo is a reliable partner and advisor when talking about the use of methionine in animal feed and more generally when advising on animal nutrition.