

Expert talk



Benchmarking phosphorus management

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Since 1991, phytase has been recognised as a cost-effective means of delivering feed savings while also reducing the phosphorus excretion in manure and the cost of environmental compliance. Using the right amounts of phytase correctly, however, has never been a straightforward job. After all, regulations on manure management, phytase technology and the knowledge on pig dietary requirements for phosphorus are continuously evolving. As a result, nutritionists need to continuously re-evaluate strategies for phosphorus management to optimise feed formulations for profitable and sustainable pig production. With regulations getting increasingly strict, the value of phytase to pig diets is increased. They also call for a more advanced phytase technology. Feed regulations controlling the registration of phytase

in different markets, however, do limit the pace of progress that can be made. It is frustrating when I talk to colleagues producing and selling enzymes to the ethanol industry and hear they are something like at least three generations ahead, simply because their regulatory process is less restrictive to progress.

A good example of how things can vary even from place to place I encountered in Canada. I came across regulations by the Canadian Food Inspection Agency, specifying a minimum level of total phosphorus content in the diet. These regulations pose a limitation on how much the phosphorus level can be lowered in swine diets and can therefore also have consequences for the achievement of reduction of phosphorus levels in manure. I also learnt about the 2013 Manitoba Swine nutrition survey carried out by the Manitoba Livestock Manure Management Initiative (MLMMI). This survey's primary objective was to quantify the range of phosphorus inclusion rates in Manitoba swine rations and to determine if opportunities exist for phosphorus reduction in diets and thus phosphorus excretion. It is interesting to see the differences between feed companies in the management of phosphorus in pig diets. One of the survey's outcomes? A suggestion for phytase manufacturers to better convey information on the efficacy of using phytase. **PP**