

Boosting boar fertility

One of the world's foremost pig genetics businesses, JSR Genetics, is sharing one of the secrets of its success – Prosperm Plus – with stud boar owners and AI users.

A convenient and palatable daily supplement, it helps to maximise both semen output and the quality of individual sperm. This product is now being used routinely across all JSR stud boars.

International peer reviewed research has shown that boar semen has significantly less 22:6n3 fats when compared to that of other mammals; whilst ram semen has 61.4%, that of boars has just 32.7%.

Prosperum Plus, a palatable pellet containing Hi-DHA oil, redresses this imbalance and, at the same time, adds two other beneficial antioxidants – selenium and vitamin E.

The fat composition of boar semen suggests a potential lack of a key component compared to other mammalian semen. Hence the idea to increase 22:6n3 in feed of the boar.

The result of feeding boars Prosperm Plus is a dramatic rise in total sperm numbers, with trials showing increases of up to 53 billion and improved ejaculate concentration levels of up to 15%.

For boar owners this raises the number of inseminations that can be made per collection.

	18:2n6	20:4n6	22:5n6	22:6n3
Boar	2.1	3.2	27.9	32.7
Bull	3.0	3.3	6.9	55.4
Ram	1.7	4.5	1.0	61.4
Man	1.8	2.5	-	58.7

Table 1. Fat composition of spermatozoa in various species (% total fatty acid).

The benefits for AI users are equally positive. Prosperm Plus also enhances sperm quality in terms of motility and viability and trials have shown improved conception rates of up to 7.8% and a 4% increase in pigs born alive per litter.

“Prosperum Plus is the result of several years of working closely with leading research bodies and international nutritionists,” Dr Grant Walling, JSR's director of research and genetics, told International Pig Topics. “Trials, and our own experience, have both shown significant improvements in both effective matings and litter size. It is a totally natural product, offering considerable financial benefits for the boar owner and the AI user alike.” ■

Fig. 1. Effect of the diet on the total viable sperm number per ejaculate.

