



Trial description

1 Set-up

- **Location:** Euronutrition-CCPA, France
- **Trial date:** 1/10/2014 to 18/12/2014 (77 days)
- **Animals:** 48 pigs of \pm 30 kg BW (68 d old) at start, individually kept (6 treatments x 8 pigs) until 110 kg BW
- **Feed:** wheat/soy diets without added phosphates.
 - Grower 1 and 2 (day 68-110; 2320 kCal NEpigs, 15 % CP, 0.85 % dig. Lys, 0.65 % Ca and 0.13 % Dig. P)
 - Finisher (day 110-145; 2320 kCal NEpigs, 15 % CP, 0.75 % dig. Lys, 0.65 % Ca and 0.13 % Dig. P)

2 Treatments

- Negative control (no added inorganic P; 1.3 g dig. P per kg feed background).
- Negative control + 0.5, 1.0 or 1.5 g dig. P from MCP
- Negative control + OptiPhos® at 250 or 500 OTU/kg

3 Measurements

- Growth and feed intake
- Sampling of the external metacarpus of the right forelimb of pigs at slaughter to determine bone ash

Results

- The performance of pigs fed feed with OptiPhos® at 500 OTU/kg was equal to the performance of pigs fed feed with 1.5 g extra dig. P from MCP (Table 1).
- From the correlation between added dig. P and bone ash (bone ash = 2.56 x added dig. P + 30.24) it can be calculated that 250 OTU and 500 OTU OptiPhos® equals 1.35 and 1.50 g dig. P respectively.

Table 1: effect of different treatments on technical result and bone ash

Treatment	Daily gain (g)	Start weight (kg)	Final weight (kg)	Daily feed intake (g)	FCR	Bone ash (% on DM)
NC (1.3 g/kg Dig. P)	961	29.5	103.5	2429	2.53	30.50
NC + 0.5 g/kg dig. P as MCP	934	29.6	101.6	2391	2.56	30.97
NC + 1 g/kg dig. P as MCP	993	29.6	106.1	2383	2.4	33.12
NC + 1.5 g/kg dig. P as MCP	1055	29.9	111.1	2485	2.36	34.05
NC + OptiPhos® 250 OTU/kg	1014	29.5	107.6	2424	2.39	33.69
NC + OptiPhos® 500 OTU/kg	1049	29.7	110.4	2489	2.37	34.09

Conclusion

OptiPhos® at 250 and 500 OTU/kg provides 1.35 and 1.50 g dig. P in pig fattening diets respectively, which is even higher than the matrix values of 0.96 and 1.20 g dig. P.

250 OTU OptiPhos is equivalent to 50g of Optiphos 10,000 PF coated per tonne of feed