

Available phosphorus requirement of laying hens



Organisation: University of Queensland

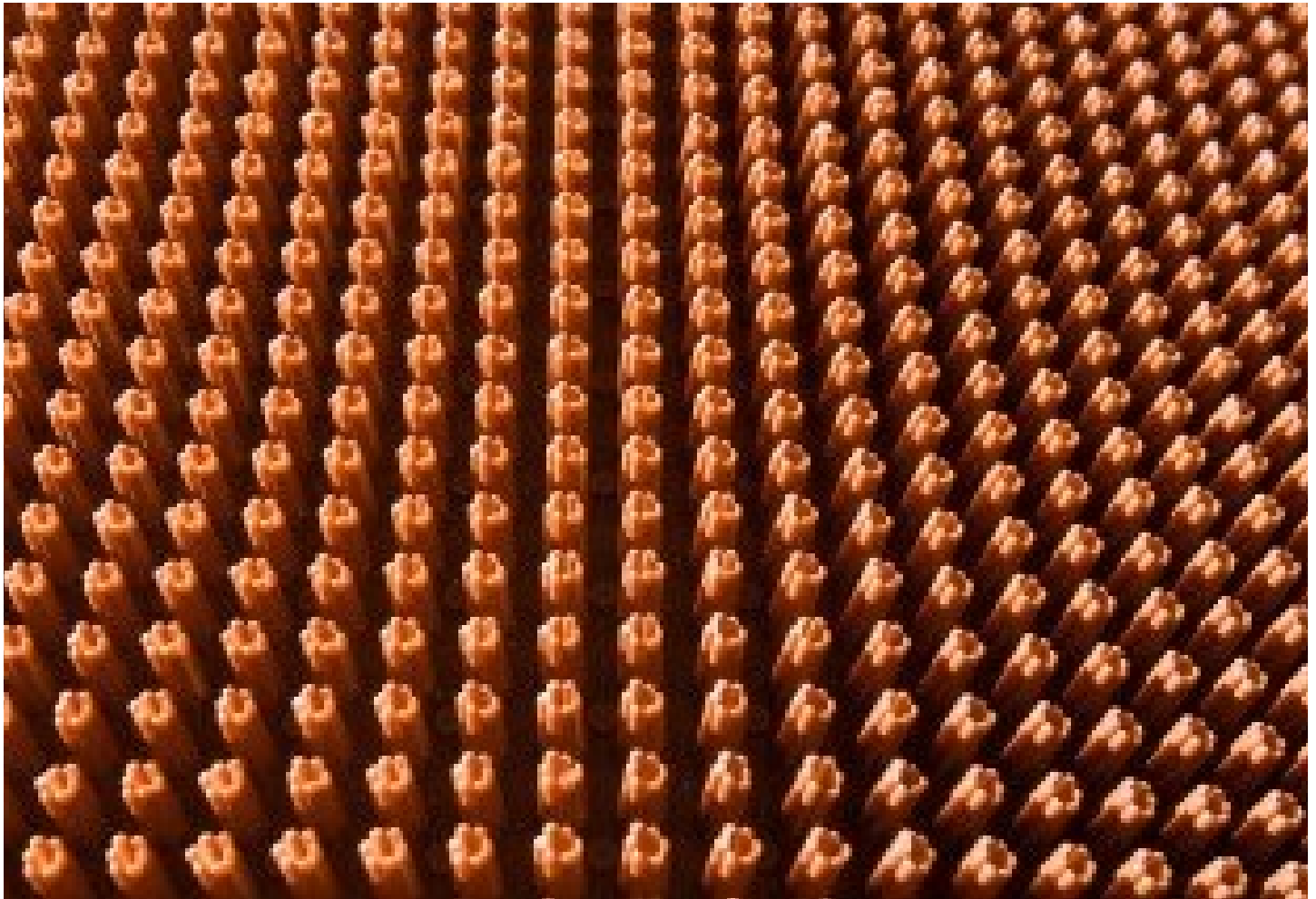
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Two experiments were conducted to determine the available phosphorus (AP) requirement of laying hens and to examine the effect of different dietary AP and calcium (Ca) concentrations on egg production and egg shell quality from the start of lay to 80 weeks of age. The influence of dietary phytase supplementation was also examined. The established adequate Ca and phosphorus (P) levels for layers have been challenged due to the continuous advances in genetic improvement, nutrition, environment, and management.

A high level of egg production was maintained in both experiments and it appears that all the dietary AP concentrations met the P requirement of hens even at the lowest level of 1.5 g/kg diet (for hens fed wheat and sorghum based diets). The results obtained from the present study are in agreement with overseas reports, which suggest that modern laying hen strains have much lower AP requirements than earlier strains.