

How do chestnut wood tannins influence digestibility and metabolism in laying hens ?

K. Buyse^{1,2}, B. Wegge³, L. Goethals³, E. Delezie¹, G.P.J. Janssens², M. Lourenço¹

1 ILVO – Animal Sciences Unit, Melle, Belgium

2 Department of Nutrition, Genetics and Ethology, Ghent University, Merelbeke, Belgium

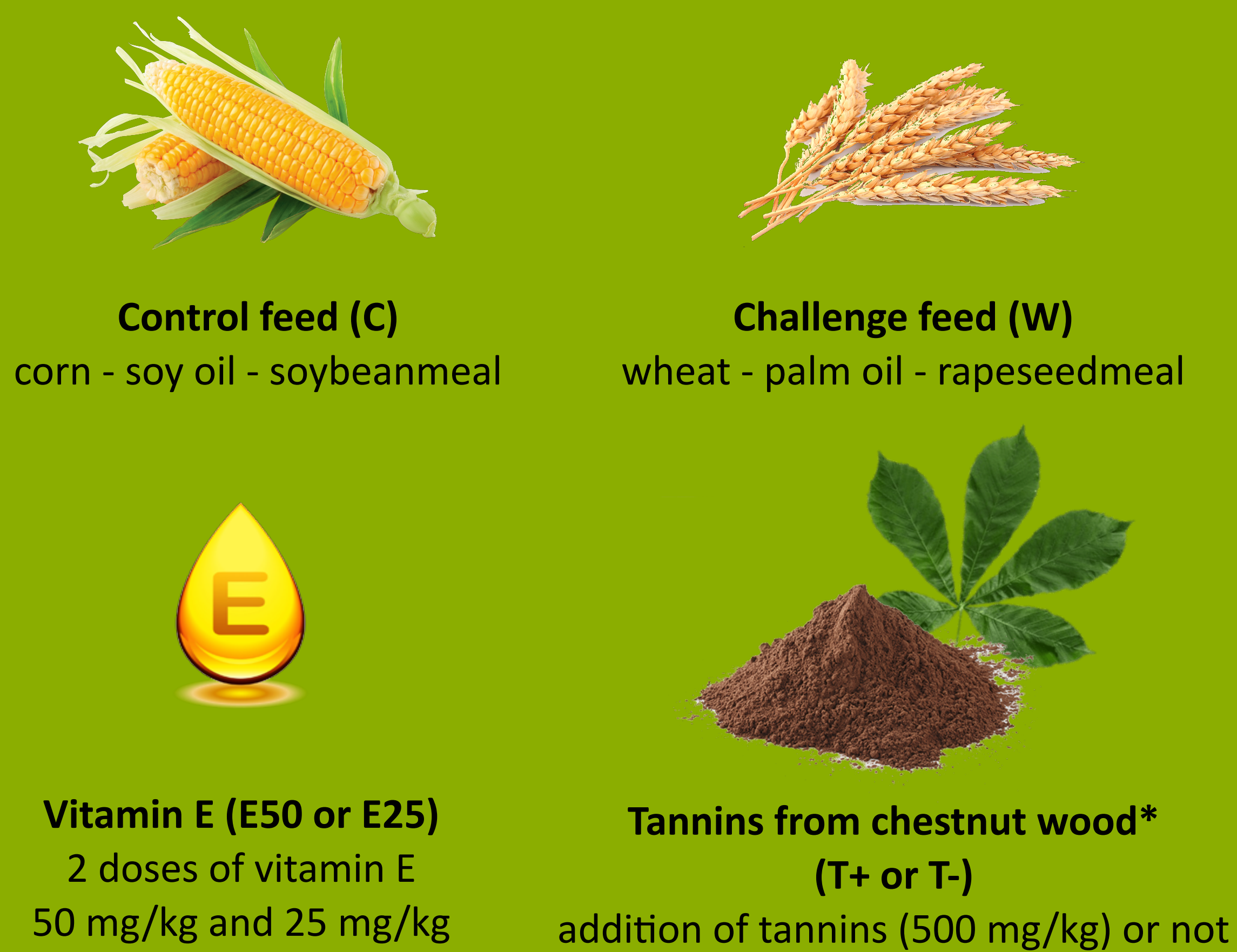
3 Sanluc International NV, Oosterzele, Belgium

From the scarce literature available, it seems that small doses of chestnut tannins can be beneficial for poultry gut health and overall performance, but the working mechanism is not well known.

Two types of feed were tested to assess the types of ingredients on the modes of action of tannins and the vitamin E dose was included as factor to evaluate whether tannins can replace vitamin E as a strong antioxidant.



Study design

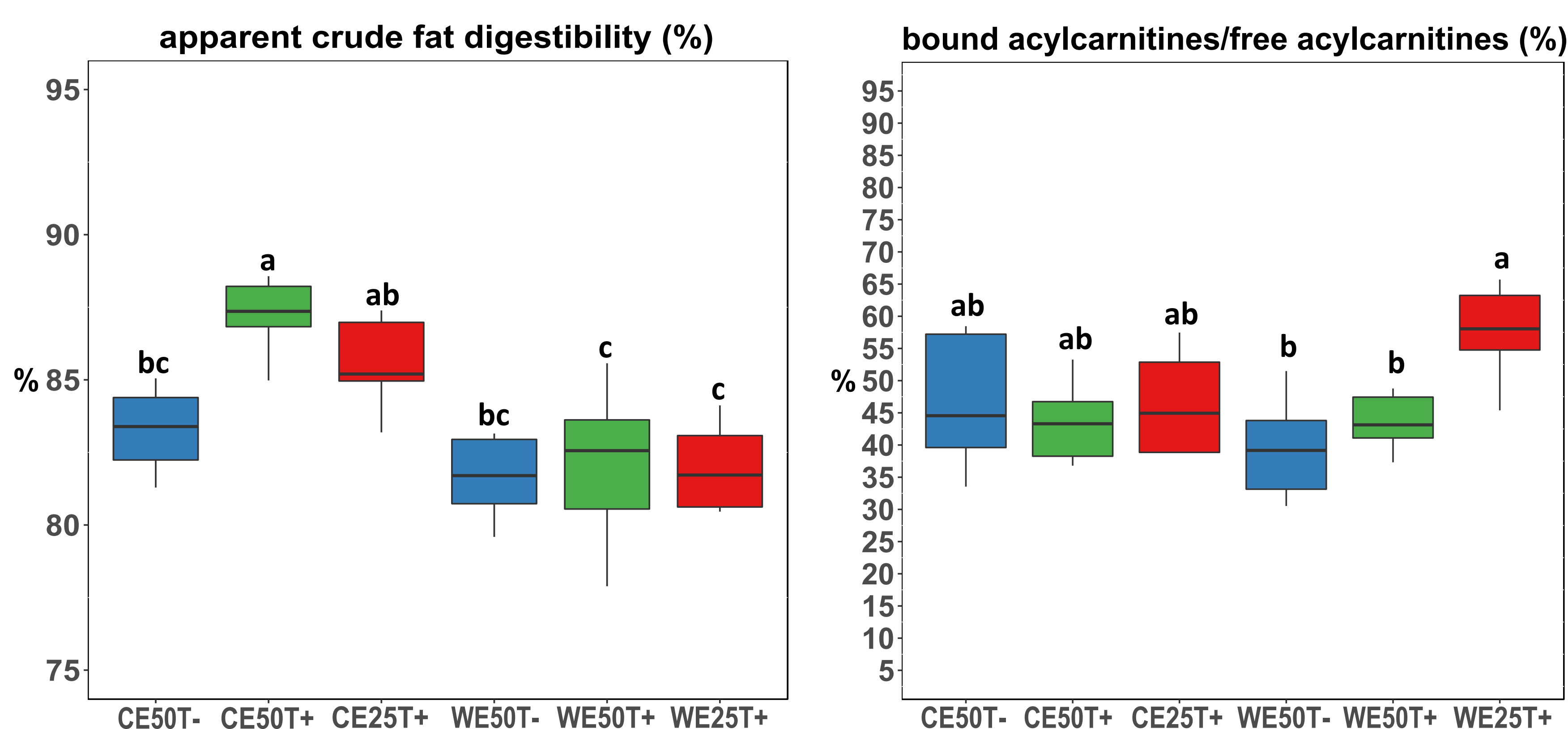


brown laying hens
age: 32 weeks
housing: metabolic units
6 treatments (n=9)

C E50 T-
C E50 T+
C E25 T+
W E50 T-
W E50 T+
W E25 T+

*Tanno-SAN, Sanluc International NV, Oosterzele, Belgium

Results



*Obtained results are valid for Tanno-SAN® (Sanluc International NV) and cannot be extrapolated to similar products

For the following parameters no significant differences were observed between the six treatments:

apparent gross energy digestibility, apparent crude protein digestibility, metabolisable energy, viscosity of proximal and distal small intestines, plasma ORAC and passage rate (TiO₂)

Conclusion

Chestnut wood tannins affect fat digestibility & fat metabolism in laying hens at their laying peak

Future studies: Why ? and in broilers ?

contact: Kobe.Buyse@ilvo.vlaanderen.be