Effect of plant extract blends in two rearing densities on growth performances of broiler chickens according to their growth potential

Sarah S. Guardia, F. Recoquillay, Herve H. Juin, Michel Lessire, Maryse Leconte, Jean-François Guillot, Irène Gabriel

Effect of plant extracts and stocking density on growth performances of broiler chickens according to their growth potential

Guardia S.[1], Recoquillay F.[2], Juin H.[3], Lessire M.[1], Leconte M.[1], Guillot J.-F.[4], Gabriel I.[1]

[1]INRA - UR 83, URA, 37380 Nouzilly, FRANCE, *[2]PHYTOSYNTHESE - Z.I. de Mozac Volvic, 63203 Riom, FRANCE, [3]INRA – UEASM, Le Magneraud, 17700 Surgeres, FRANCE, [4]I.U.T. de Tours- 29, rue du Pont-Volant, 37082 Tours, FRANCE*

Aims

Investigating the effect of plant extracts (EXV) on the broiler chicken according to :

- Growth potential (d10 weight)
- Stocking density

Materials & Methods

Animals : White PM3 Ross broilers

Housing conditions : 3 m² floor pen
6 repeat per treatment

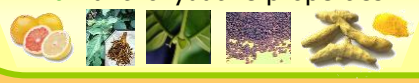
Stocking density : 12 birds/m² (normal density)
17 birds/m² (high density)

Dietary treatments :

Control: Basal diet (Wheat / Soybean meal / Maize)

Exp1: EXVa d22-39; **Exp2:** EXVb d1-10 and EXVa d10-39

EXVb : anti-oxydative properties EXVa : anti-bacterial properties



Analysis of variance

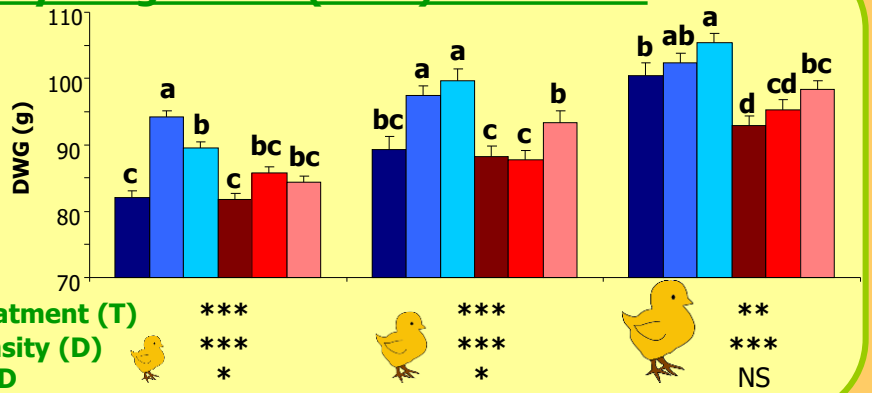
	DWG d24-39	Weight d39
Density (D)	NS	NS
Dietary treatment (T)	**	*
d10 weight (W)	***	***
D x T	NS	NS
D x W	NS	NS
T x W	*	*
D x T x W	NS	NS

➔ Significant effect of d10 weight

➔ 3 groups created according to d10 weight :

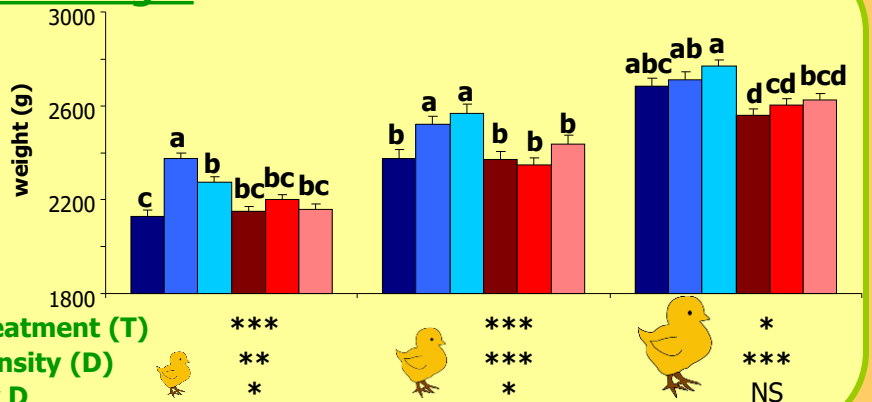
Light, **Medium** and **Heavy**

Daly Weight Gain (DWG) d24 to d39



	Light	Medium	Heavy
Treatment (T)	***	***	**
Density (D)	***	***	***
T x D	*	*	NS

D39 Weight



	Light	Medium	Heavy
Treatment (T)	***	***	*
Density (D)	**	***	***
T x D	*	*	NS

For each group, at normal density n=66 and at high density n=94

Normal Density: Control, Exp1, Exp2

High Density: Control, Exp1, Exp2

Conclusion

EXV efficiency varies according to growth potential and stocking density

Low potential birds	**High potential birds**
Normal density	**Normal and High density**
EXVa alone more efficient	**EXVb and EXVa succession more efficient**

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sarah.guardia@tours.inra.fr