

Use of Galvanised Burr (*Sclerolaena birchii*) in Diets for Chickens

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Galvanised burr is a noxious weed, native to semi-arid eastern Australia. It is a densely branched short shrub with broad hairy leaves and spiny burrs along the stems making it a very problematic weed in many areas. Initial interest of galvanised burr as a feed supplement arose from the finding that younger plants may contain up to 20% crude protein.

A milled sample of galvanised burr containing approximately 14% crude protein was included to a level of 13% in a diet for broiler chickens. The growth and FCR of the chickens was compared on a standard pelleted diet and on a pelleted diet containing galvanised burr. In the burr diet, milled burr replaced wheat and wheat bran in the standard diet and the metabolisable energy was made up with the addition of vegetable oil. The diets were formulated to provide 12.5 MJ M.E. and 23% CP and other nutrients to Australian standards.

Thirty-two cockerels were assigned to the two dietary treatments (16 birds per treatment, two replicates of 8 birds per treatment). The birds had been raised to 12 days of age on a standard broiler starter diet and had reached mean weight of 164 g They were

raised from day 12 to day 26 of age in stacked brooder cages. Food and water were provided *ad libitum*. Food intake and growth rate were measured. There were no mortalities during the two-week growth period. The birds were killed on day 26 and the abdominal fat pad removed and weighed. These measurements are recorded in the following table.

As there was no significant difference in any parameter between the diets we conclude that galvanised burr may be used in diets for broilers to replace at least 8% of the crude protein. There was no evidence of any toxic or detrimental effects at this inclusion level.

References

Parsons, W.T. and Cuthbertson, E.G. (1992). Noxious weeds of Australia. Inkata Press, Melbourne

Growth rate, feed conversion ratio (FCR) and abdominal fat pad weight in chickens.

Diet	Growth Rate (g/day)	FCR	Fat pad (%liveweight)
Control diet	31.3 ±1.36	2.07 ±.061	0.89 ±0.09
Burr diet	33.2 ±1.44	1.92 ±.048	0.96 ±0.07