



Nitrogen Fixing Tree Research Reports

A publication of the
Nitrogen Fixing Tree Association
Winrock International, Route 3 Box 376, Morrilton,
Arkansas 72110-9537 USA

December 27, 1994

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I am pleased to inform you that the following submission to *Nitrogen Fixing Tree Research Reports* will be published in volume 12 (1994):

Ayoade, J.A., S.N. Carew, and A.A. Wuanor. Performance of weaner rabbits fed *Gliricidia sepium*
Nitrogen Fixing Tree Research Reports 12:72-73.

Authors who are NFTA network participants (formerly referred to as NFTA Associates) will receive a copy of the journal. Authors who are not NFTA network participants and who wish to have a copy of volume 12 should write to request a copy.

Thank you very much for submitting your work to NFTRR.

Sincerely,

Dale O. Evans
Editor

c: M. Powell
J. Roshetko

Performance of weaner rabbits fed graded levels of gliricidia sepium hay. J. A. Ayode, S.N. Carew and A. A. Wuanor

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Gliricidia sepium is a tree fodder plant for livestock (Mba et al, 1982; Onwuka, 1985). However, some potentially toxic substances have been isolated from the plant (Devendra, 1983; Monidol, 1985; Griffiths, 1962). The effects of feeding gliricidia sepium hay to weaner rabbits is the subject of this study.

Gliricidia sepium leaves were harvested and air-dried for 5 days, milled and incorporated into weaner rabbit rations at graded levels of 0%, 25% 50% and 75%. The four rations were tested with twenty crossbred rabbits aged 5 weeks old and allotted into four groups of five animals each in a completely randomised experimental design lasting 6 weeks. Feed intake, weight changes and feed conversion ratio were recorded. Three animal per group were slaughtered for dressing percentage determination.

Table 1. Performance and dressing percentage of weaner rabbits fed graded levels of gliricidia sepium hay*

	Level of gliricidia sepium hay inclusion			
	0%	25%	50%	75%
Initial weight (g)	466	462	470 ^b	470
Final weight (g)	920	1094	1100	700
Daily weight gain (g)	10.81	15.05	15.0	9.3
Daily feed intake (g)	26.4	40.95	36.90	29.29
Feed intake/gain	2.57	3.32	4.12	5.37
Dressing percentage	77.39 ^a	78.36 ^a	73.19 ^b	**

*Means followed by common letter are not significantly different ($P > 0.05$).

**All animals on 75% inclusion level died at the end of the fifth week.

The results of the study are summarized in Table 1. There were no significant ($P > 0.05$) effects of feeding *gliricidia sepium* hay on daily weight gain, daily feed intake and feed conversion ratio. However, the dressing percentage was significantly ($P < 0.05$) affected. The predicted body weight at 200 days was 2.34kg, 2.72kg, 2.85kg and 1.98kg for 0%, 25%, 50% and 75% inclusion levels respectively. The 100% mortality recorded in rabbits on 75% inclusion of *gliricidia sepium* at the end of 5th week of this study might be due to the combined effects of poisonous compounds (like alkaloids, nitrates coumarin and O-coumaric acid) in *gliricidia* which may be above the threshold level at 75% inclusion level whereas at lower levels (25% and 50% levels) may not be dangerous. The results suggest that *gliricidia sepium* hay can be used in weaner rabbits diets without adversely affecting the growth performance and dressing percentage. Further study on toxicity of the plant to rabbits is recommended.

References

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