

Table S2 Parameter estimates for the negative binomial demographic stochastic Ricker model fitted to the time series of *Armigeres subalbatus* biweekly abundance. Models were fitted with (Forced) and without (Autonomous) rainfall as covariate. AIC stands for the Akaike Information Criterion.

Parameter	Forced				Autonomous			
	Estimate	S.E.	z	P	Estimate	S.E.	z	P
Intrinsic rate of population growth ($\hat{\lambda}$)	1.57	0.83	1.88	NS	5.40	2.25	2.39	*
Density dependence coefficient (\hat{b})	-0.10	0.02	-4.18	**	-0.13	0.02	-	**
Rainfall coefficient ($\hat{\gamma}$)	0.0054	0.0021	2.51	*	-	-	-	-
Negative binomial overdispersion (\hat{k})	0.56	0.39	-		0.27	0.14		
AIC	79.32				81.89			

NS= not significant ($P>0.05$), **Statistically significant ($P<0.001$), *Statistically significant ($P<0.05$)