

The SAS System

Obs	Year	Tier	treatment	dmg_now	tot_nuts	start_when	insecticide	pctNOW
1	2015	1	EarlyC	137	4565	early	Yes	3.0010952903
2	2015	2	EarlyMD	93	4575	early	No	2.0327868852
3	2015	3	StandC	28	4532	standard	Yes	0.6178287732
4	2015	4	StandMD	44	4476	standard	No	0.9830205541
5	2015	5	EarlyC	99	4677	early	Yes	2.116741501
6	2015	6	EarlyMD	176	4531	early	No	3.8843522401

The SAS System

The GLIMMIX Procedure

Model Information	
Data Set	WORK.Y15
Response Variable (Events)	dmg_now
Response Variable (Trials)	tot_nuts
Response Distribution	Binomial
Link Function	Logit
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Residual PL
Degrees of Freedom Method	Kenward-Roger
Fixed Effects SE Adjustment	Kenward-Roger

Class Level Information		
Class	Levels	Values
Tier	8	1 2 3 4 5 6 7 8
start_when	2	early standard
insecticide	2	No Yes

Number of Observations Read	8
Number of Observations Used	8
Number of Events	1284
Number of Trials	33503

Dimensions	
G-side Cov. Parameters	1
Columns in X	9
Columns in Z	8
Subjects (Blocks in V)	1
Max Obs per Subject	8

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1

Lower Boundaries	1
Upper Boundaries	0
Fixed Effects	Profiled
Starting From	Data

Iteration History					
Iteration	Restarts	Subiterations	Objective Function	Change	Max Gradient
0	0	1	16.268174722	0.00002703	9.756E-6
1	0	0	16.268176359	0.00000000	9.445E-6

Convergence criterion (PCONV=1.11022E-8) satisfied.

Fit Statistics	
-2 Res Log Pseudo-Likelihood	16.27
Generalized Chi-Square	4.00
Gener. Chi-Square / DF	1.00

Covariance Parameter Estimates		
Cov Parm	Estimate	Standard Error
Tier	1.6949	1.2086

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
start_when	1	3.994	0.00	0.9852
insecticide	1	3.994	0.53	0.5067
start_whe*insecticid	1	3.994	0.37	0.5773