## The SAS System

## **The Mixed Procedure**

Model Information						
Data Set	WORK.PLANTACID					
Dependent Variable	у					
Covariance Structure	Variance Components					
Estimation Method	Type 3					
Residual Variance Method	Factor					
Fixed Effects SE Method	Model-Based					
Degrees of Freedom Method	Satterthwaite					

Class Level Information						
Class	ss Levels Values					
plant	4	1234				
leaf	3	123				

Dimensions				
Covariance Parameters	3			
Columns in X	1			
Columns in Z	16			
Subjects	1			
Max Obs per Subject	36			

Number of Observations			
Number of Observations Read	36		
Number of Observations Used	36		
Number of Observations Not Used	0		

	Type 3 Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	Expected Mean Square Error Term			F Value	Pr > F	
plant	3	343.178889	114.392963	Var(Residual) + 3 Var(leaf(plant)) + 9 Var(plant)	MS(leaf(plant))	8	4.88	0.0324	
leaf(plant)	8	187.453333	23.431667	Var(Residual) + 3 Var(leaf(plant))	MS(Residual)	24	185.39	<.0001	
Residual	24	3.033333	0.126389	Var(Residual)					

Covariance Parameter Estimates							
Cov Parm Estimate Alpha Lower U							
plant	10.1068	0.05	-10.3930	30.6066			
leaf(plant)	7.7684	0.05	0.1142	15.4227			
Residual	0.1264	0.05	0.07706	0.2446			

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Fit Statistics				
-2 Res Log Likelihood	92.7			
AIC (Smaller is Better)	98.7			
AICC (Smaller is Better)	99.5			
BIC (Smaller is Better)	96.9			

Solution for Fixed Effects								
Effect	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
Intercept	14.2611	1.7826	3	8.00	0.0041	0.05	8.5882	19.9341