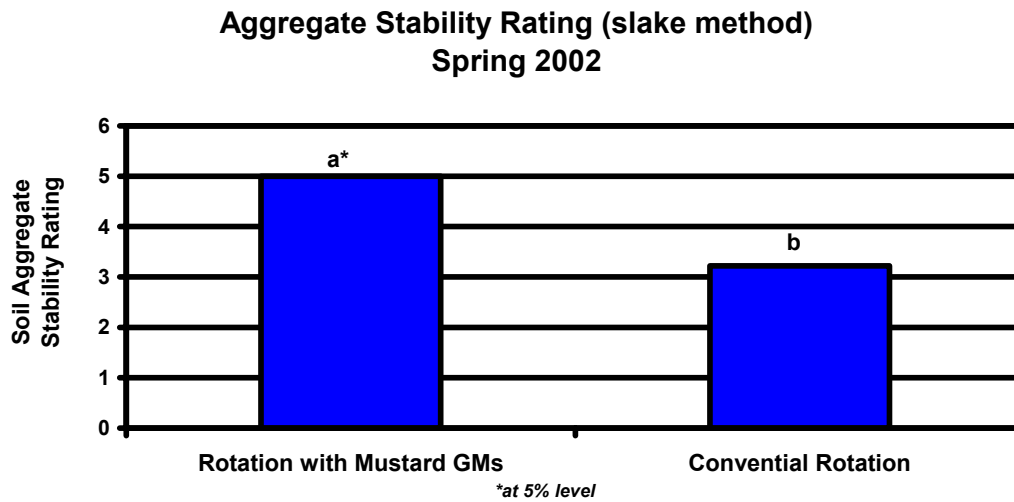


Results:

**Average Infiltration Rates, after consecutive 1"
 applications of ponded water**

Rotation with mustard green manures		Rotation without green manures	
Date and Point in rotation	Average Infiltration Rates		
	1st inch	2nd inch	3rd inch
-----in/min-----			
September 3, 1999			
After wheat harvest	1.39a	0.48a	
After wheat harvest	0.13b	0.18b	
November 2, 2000			
After potato harvest	0.20b	0.19a	0.16
After sugarbeet harvest	0.39a	0.05b	
March 7, 2001			
Potatoes/winter	0.57a	0.10a	
Sugarbeets/winter	0.06b	0.05b	
March 5, 2002			
Potatoes/winter	0.14	0.09a	0.08
Fallow/winter	0.10	0.05b	

Results:



Details:

Procedure used was that described in the Soil Quality Test Kit Guide, located online at <http://soils.usda.gov/sqi/kit2.html>.

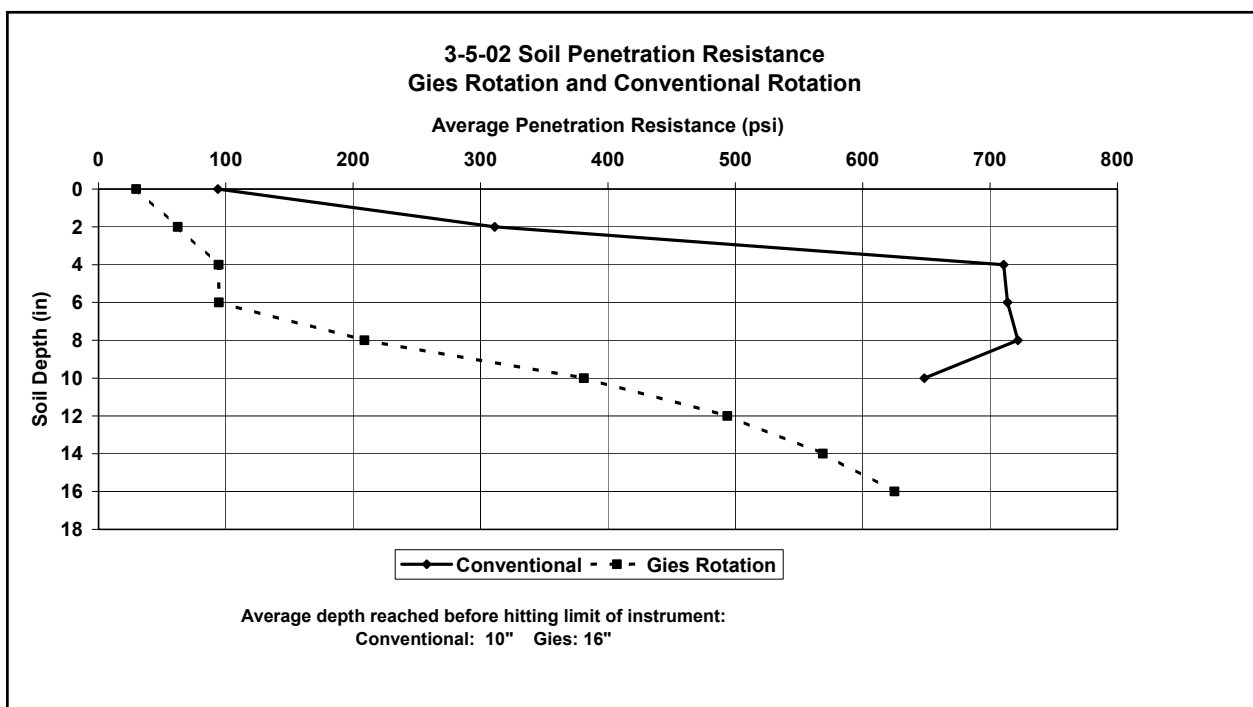
Results:

9/3/1999: Depth to which a brazing rod could be pushed by hand

Field in Gies rotation: 11.0"

Field in Conventional rotation: 7.3"

Difference significant at 0.001 level.



Details: Average of 13 locations in each field using Spectrum soil penetrometer.