

Mustard Green Manures
On-farm Research Results
Measurement: Glucosinolate
Concentration

Results:

Glucosinolate Concentrations of Field-Grown Mustard Shoots
2003

<i>Brassica juncea</i>		ITC Producing Glucosinolate		<i>Sinapis alba</i>		ITC Producing Glucosinolate umol/g	
Variety	2-propenyl	Variety	4-OH-benzyl	Variety	Benzyl	Variety	Total
PI458934 ²	24.3 a	Absolut	17.0	Absolut	7.9 abc	Absolut	24.9
ISCI 99	21.5 ab	Absolvent	23.2	Absolvent	8.7 ab	Absolvent	31.9
ISCI 61	19.3 abc	Ames 19270 ²	18.1	Ames 19270	11.4 a	Ames 19270	29.5
2003-84	17.2 bc	Cover	18.5	Cover	4.9 bc	Cover	23.3
2003-615	15.8 bc	Ida Gold	20.5	Ida Gold	4.0 c	Ida Gold	24.4
ISCI 20	14.5 c	Luna	19.0	Luna	6.9 abc	Luna	26.0
Pacific Gold	12.7 c	Martigena	26.0	Martigena	7.1 abc	Martigena	33.0
	3-butenyl 0.05						
PI458934	5.9 a						
ISCI 99	6.7 a						
ISCI 61	1.3 b						
2003-84	3.8 ab						
2003-615	0.0 b						
ISCI 20	3.4 ab						
Pacific Gold	1.1 b						
	Total 0.01						
PI458934	30.3 a						
ISCI 99	28.3 ab						
ISCI 61	20.5 abc						
2003-84	21.0 abc						
2003-615	15.8 c						
ISCI 20	17.9 bc						
Pacific Gold	13.8 c						
	0.01						

¹ Varieties not connected by same letter are significantly different (levels listed below columns)

² Varieties from the USDA-ARS National Plant Germplasm System, not commercially available
 Varieties planted on 8/19 at 12 lb/ac (*S. alba*) and 10 lb/ac (*B. juncea*). Fertilized to provide 120 lb N/ac. Three replicates harvested on 10/20. All analysis done by V. Borek and M. Morra, Soil Biochemistry Laboratory, Soil Science Division, University of Idaho.