

Supporting Information

Table S1. MS³ Analysis of Select Tuber Glycoalkaloids.

Compound name	Rt (min)	MS ³	Product ions (<i>m/z</i>)
Solanida-tetraene-ol-chacotriose	8.9	862-> 408	390, 392, 380, 362, 270, 255, 372
Solanida-tetraene-ol	9.5	862-> 408	378, 392, 337, 255, 282, 337, 390
Solanida-tetraene-ol	12.6	862-> 408	390, 392, 378, 337, 255
Solasonine	11.4	884->414	396, 329.7, 271, 158, 131, 154
Leptinine I	8.6	868->414	396, 157, 253, 177, 397, 128, 378, 271
Leptinine II	8.6	884->414	396, 253, 397, 197, 171, 271, 377, 176, 271
Tomatidenol-lycotetraose	10.1	1032->414	396, 253, 271, 165, 153, 224, 145, 414
Solanid-diol-pentaose	8.1	1212->432	273, 414, 255, 203, 271, 161, 311, 147

Table S2. Ten Most Intense Ions Present in the Total Ion Current (Positive Mode) of Each Genotype.

Genotype	MS ² (relative abundance %)
<i>S. bulbocastanum</i>	868 (100), 884 (59), 576 (21), 870 (15), 722 (13), 866 (11), 886 (8), 900 (7), 574 (6), 414 (6)
<i>S. pinnatisectum</i>	1034 (100), 1032 (26), 578 (21), 576 (18), 1092 (17), 1036 (16), 527 (11), 1064 (8), 1050 (7), 378 (7)
<i>S. stenotomum</i>	852 (100), 868 (39), 560 (23), 531 (23), 695 (18), 706 (17), 398 (15), 854 (13), 474 (8), 532 (7)
<i>S. Spegazzini</i>	560 (100), 1046 (85), 868 (77), 852 (60), 398 (42), 884 (35), 531 (30), 474 (26), 695 (23), 706 (16)
‘R. Burbank’	852 (100), 560 (32), 474 (24), 531 (23), 706 (22), 868 (20), 398 (15), 854 (14), 696 (12)

Data is not specific to solanidanes and includes spirosoananes.

Figure S1. Tuber Glycoalkaloids. **(A).** The distribution of the 56 glycoalkaloids among the seven genotypes. Shown are the number of glycoalkaloids detected in only one (1 gt) to all seven genotypes (7 gt). **(B).** The total number of solanidane glycoalkaloids detected in each genotype. **(C).** The number of glycoalkaloids containing either chacotriose (chac), solatriose (sola), lycotetraose (lyco), commertetraose (comm.) or other sugars.

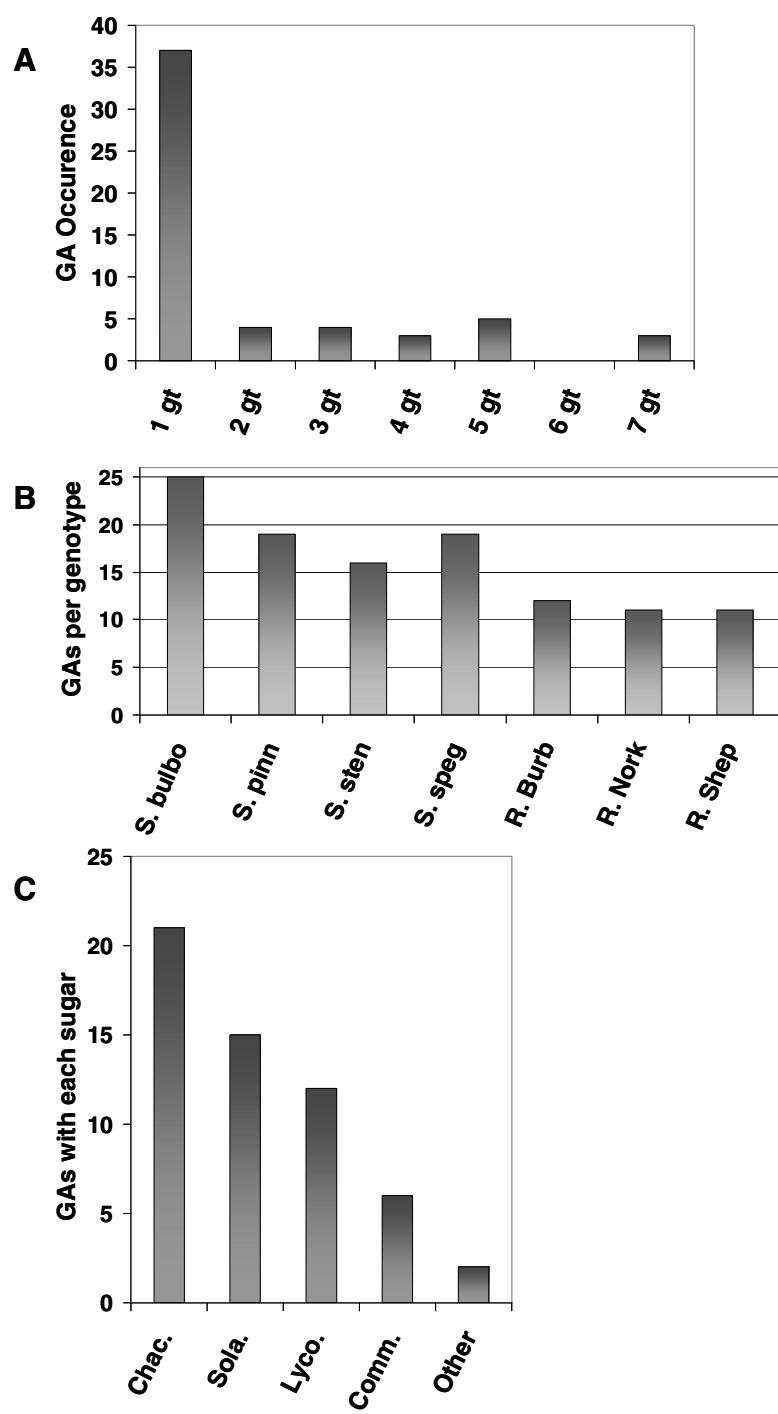


Figure S1