

Supplementary Table 1. Genotypes evaluated for alkaloid accumulation and agronomic traits.

Line		Nic1 + Nic2
Designation	BBL Genotype	Genotype
K326	<i>BBL-a/BBL-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (000)	<i>BBL-a/BBL-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (002)	<i>BBL-a/BBL-a BBL-b/BBL-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (020)	<i>BBL-a/BBL-a bbl-b/bbl-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (200)	<i>bbl-a/bbl-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (022)	<i>BBL-a/BBL-a bbl-b/bbl-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (202)	<i>bbl-a/bbl-a BBL-b/BBL-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (220)	<i>bbl-a/bbl-a bbl-b/bbl-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (111)	<i>BBL-a/bbl-a BBL-b/bbl-b BBL-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
K326 (222)	<i>bbl-a/bbl-a bbl-b/bbl-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90	<i>BBL-a/BBL-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 (000)	<i>BBL-a/BBL-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 (002)	<i>BBL-a/BBL-a BBL-b/BBL-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 (020)	<i>BBL-a/BBL-a bbl-b/bbl-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 (200)	<i>bbl-a/bbl-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 (022)	<i>BBL-a/BBL-a bbl-b/bbl-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 (202)	<i>bbl-a/bbl-a BBL-b/BBL-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 (220)	<i>bbl-a/bbl-a bbl-b/bbl-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 (222)	<i>bbl-a/bbl-a bbl-b/bbl-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC	<i>BBL-a/BBL-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC (000)	<i>BBL-a/BBL-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC (002)	<i>BBL-a/BBL-a BBL-b/BBL-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC (020)	<i>BBL-a/BBL-a bbl-b/bbl-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC (200)	<i>bbl-a/bbl-a BBL-b/BBL-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC (022)	<i>BBL-a/BBL-a bbl-b/bbl-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC (202)	<i>bbl-a/bbl-a BBL-b/BBL-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC (220)	<i>bbl-a/bbl-a bbl-b/bbl-b BBL-c/BBL-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>
TN 90 SRC (222)	<i>bbl-a/bbl-a bbl-b/bbl-b bbl-c/bbl-c BBL-d1/BBL-d1 BBL-d2/BBL-d2 BBL-e/BBL-e</i>	<i>Nic1/Nic1 Nic2/Nic2</i>

TN 90 SRC (222002)	<i>bbl-a /bbl-a bbl-b /bbl-b bbl-c /bbl-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 bbl-e /bbl-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
TN 90 SRC (222020)	<i>bbl-a /bbl-a bbl-b /bbl-b bbl-c /bbl-c BBL-d1 /BBL-d1 bbl-d2 /bbl-d2 BBL-e /BBL-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
TN 90 SRC (222200)	<i>bbl-a /bbl-a bbl-b /bbl-b bbl-c /bbl-c bbl-d1 /bbl-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
TN 90 SRC (222022)	<i>bbl-a /bbl-a bbl-b /bbl-b bbl-c /bbl-c BBL-d1 /BBL-d1 bbl-d2 /bbl-d2 bbl-e /bbl-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
TN 90 SRC (222202)	<i>bbl-a /bbl-a bbl-b /bbl-b bbl-c /bbl-c bbl-d1 /bbl-d1 BBL-d2 /BBL-d2 bbl-e /bbl-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
TN 90 SRC (222220)	<i>bbl-a /bbl-a bbl-b /bbl-b bbl-c /bbl-c bbl-d1 /bbl-d1 bbl-d2 /bbl-d2 BBL-e /BBL-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
TN 90 SRC (222222)	<i>bbl-a /bbl-a bbl-b /bbl-b bbl-c /bbl-c bbl-d1 /bbl-d1 bbl-d2 /bbl-d2 bbl-e /bbl-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
NC95	<i>BBL-a /BBL-a BBL-b /BBL-b BBL-c /BBL-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
MAFC5	<i>BBL-a /BBL-a BBL-b /BBL-b BBL-c /BBL-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>Nic1 /Nic1 nic2 /nic2</i>
LMAFC34	<i>BBL-a /BBL-a BBL-b /BBL-b BBL-c /BBL-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>nic1 /nic1 Nic2 /Nic2</i>
LAFC53	<i>BBL-a /BBL-a BBL-b /BBL-b BBL-c /BBL-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>nic1 /nic1 nic2 /nic2</i>
Burley 21	<i>BBL-a /BBL-a BBL-b /BBL-b BBL-c /BBL-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>Nic1 /Nic1 Nic2 /Nic2</i>
HI Burley 21	<i>BBL-a /BBL-a BBL-b /BBL-b BBL-c /BBL-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>Nic1 /Nic1 nic2 /nic2</i>
LI Burley 21	<i>BBL-a /BBL-a BBL-b /BBL-b BBL-c /BBL-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>nic1 /nic1 Nic2 /Nic2</i>
LA Burley 21	<i>BBL-a /BBL-a BBL-b /BBL-b BBL-c /BBL-c BBL-d1 /BBL-d1 BBL-d2 /BBL-d2 BBL-e /BBL-e</i>	<i>nic1 /nic1 nic2 /nic2</i>
