

Evaluation of *Salix* spp. genotypes from European, Swedish and American breeding programmes

Alistair R. McCracken^{1*}, Lawrence B. Smart², Linda Walsh¹, Kim Cameron², Paul J. Moore¹,
¹Agri-Food & Biosciences Institute, N. Ireland, UK: ²Dept. of Horticulture, Cornell University, USA

Salix spp. genotype trial

• AIM

The aim was to compare survival, growth, yield and pest and disease susceptibility of *Salix* spp. genotypes from breeding programmes in Europe and the USA, when grown in N. Ireland and New York State.

• Thirty-nine genotypes

- 16 from USA breeding programme
- 14 from European breeding programme
- 7 from Swedish breeding programme
- 2 others

• Planted at two sites

- AFBI, Loughgall, Co. Armagh, N. Ireland
- Tully Field Station, New York State, USA

• Planting protocol

- Single: Double: Single rows
- Planted June 2007
- Cut back December 2007
- Harvested (2-years growth) December 2009

Results

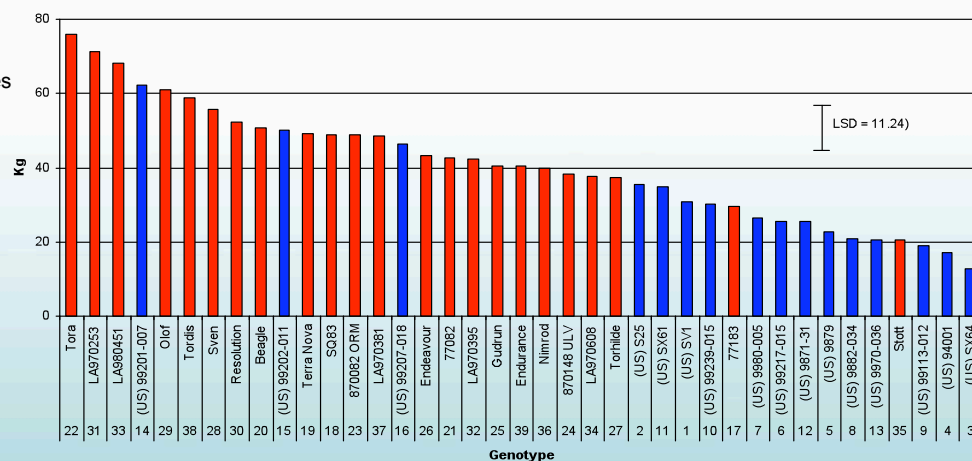
• Northern Ireland

- Survival > 90% with exceptions of Nimrod and Endurance and the US S25
- Highest yields from Tora (Swedish), LA970253, LA980451 (European) and 99201-007 (American)
- Generally American genotypes did not produce high yields

• America

- Of the 13 genotypes received in the US only four (Nimrod; Terra Nova, LA970253, and LA980451) had good growth potential and did not suffer excessively from potato leaf hopper.
- The trial was cut back in winter 08-09 to make cuttings after the quarantine was lifted
- Nimrod; Terra Nova, LA970253, and LA980451 have been planted in a ten variety, yield trial in Geneva on Cornell land.

Total Plot Dry Weight



Northern Ireland Trial: Total plot weight (2-year harvest) harvested December 2009.
 (American genotypes are blue bars: other genotypes are red bars)



NI genotype trial



(US) 99201-007



Tora



(US) SX64



Potato Leaf Hopper
 (*Empoasca fabae*) damage