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

Alistair R. McCracken1*, Lawrence B. Smart2, Linda Walsh1, Kim Cameron1, 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.

American genotypes are blue bars: other genotypes are red bars

Alistair R. McCracken, Applied Plant Science & Biometrics Division, AFBI, 18A Newforge Lane, Belfast BT9 5PX, N. Ireland UK (Alistair.mccracken@afbini.gov.uk)
Lawrence B. Smart, Cornell University, Dept. of Horticulture, New York State Agricultural Experiment Station, 630 West North Street, Geneva, NY 14456 (lbs33@cornell.edu)