Electroporation of Agrobacterium tumefaciens

- 1. Incubate A. tumefaciens in 30 ml of YEB overnight at 28C with shaking.
- 2. Chill the bacteria on ice and centrifuge at 3000 rpm for 10 min. at 4C
- 3. Xxx
- 4. Take the bacteria up in 1 ml ddH_20 at 0C.
- 5. Place an electroporation cuvette on ice to chill. Pipette in 100 ul bacteria. Add 200 to 500 ng of plasmid in water or TE. Used 1 ul of a 1:10 dilution of plasmid and gently mixed with the pipette tip.
- 6. Electroporate at 200 ohms, 25 uF, 2.5 kV at room temperature (takes only a few seconds). For 0.2 cm cuvettes, use 2.5 kV. For 0.1 cm cuvettes, use 1.8 kV. These specifications are for the BioRad electroporator for *E. coli*, cat. no. 165-2098.
- 7. Add immediately 400 ul of YEB + 1% mannitol.
- 8. Incubate bacteria in a eppendorf tube or the cuvette for 3 hours at 28C.
- 9. Plate bacteria on YEB (+1% mannitol?) with selective antibiotic and incubate for two to three days at 28C.

Prepare ahead of time:

YEB:

5 g/l beef extract (Tryptone)

1 g/l yeast extract

5 g/l peptone

5 g/l saccrose

1.8% agar

Adjust pH to 7.2

After cooling, add 2 ml/l of 1 M MgSO₄

Rif (rifampicyna) added at 50 mg/l

100 ml of double distilled water at 0C