**DNA extraction with Chelex**

Adapted from Melanie Smee

1. Make up 5% Chelex solution in distilled, sterilized water. Vortex well.
2. Squish aphid in 200ul 5% Chelex solution; keep Chelex well mixed prior to pipetting.
3. Add 10ul of Proteinase-K (at 10mg/ml) to sample.
4. Vortex sample for 5-10 seconds.
5. Incubate at 56 ⁰C overnight.
6. Vortex sample for 5-10 seconds.
7. Incubate in a heating pad at 100⁰C for 8 minutes.
8. Vortex sample for 5-10 seconds.
9. Centrifuge sample for 3 minutes at 13,000rpm.
10. Remove supernatant into a new, labeled microtube, leaving Chelex in the old tube.
11. Store at -20⁰C.

Notes:

* Chelex 100 Resin – BioRad 220-400 mesh Molecular Biology Grade Cat.# 142-1253 (50g)
* Proteinase K – Promega Lyophilised powder Cat.# V302B (100mg)
* Proteinase K - 10mg/ml. Reconstitute in 50mM Tris-HCl (pH8), 10mM CaCl2
* For 10ml - 100mg Proteinase K, 9.4ml Purite water, 500ul 1M Tris-HCl, 100ul 1M CaCl2