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NEW ECHINOCOCCUS SPP. QPCR

- We are developing a new multiplex qPCR that differentiate between *E. multilocularis*, *E. granulosus* s.s., and *E. granulosus* s.l.

Set-up

- Target: 12S mitochondrial DNA
- Prod. size: 119 bp
- Primers: 2 forward and 3 reverse
- Probes: 3 (*E.m.*, *E.g.s.s.*, *E.g.s.l.*)
- Inhibition control

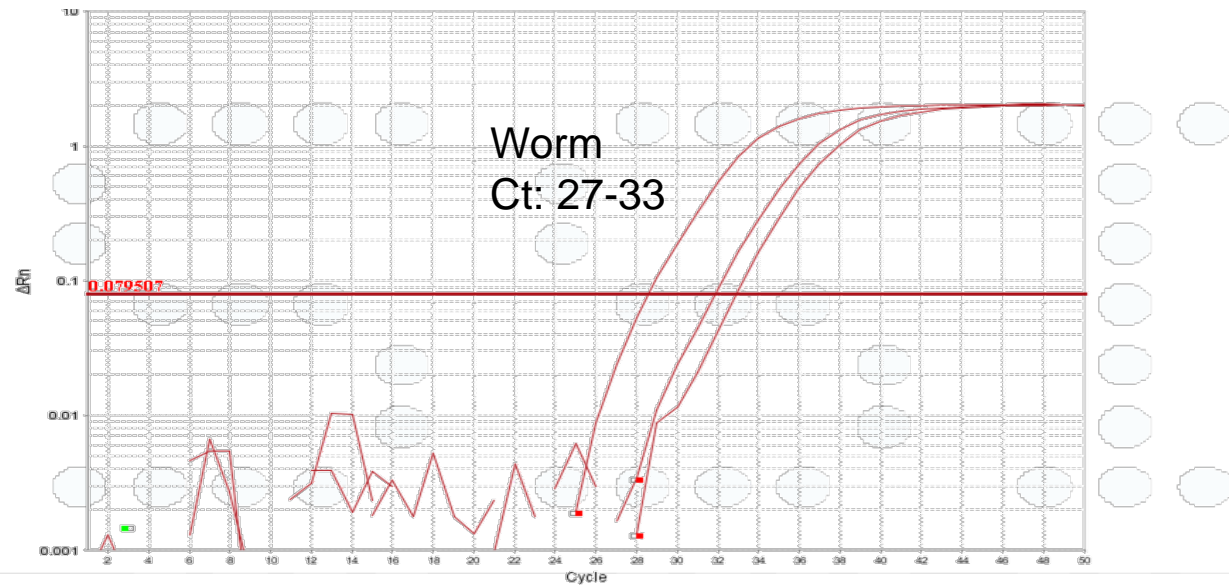
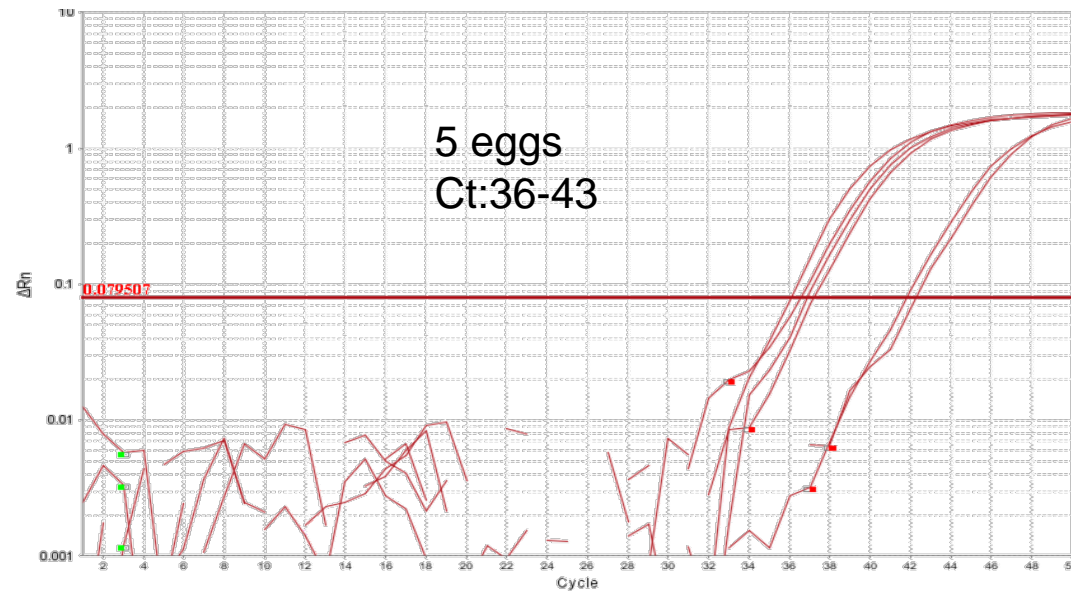
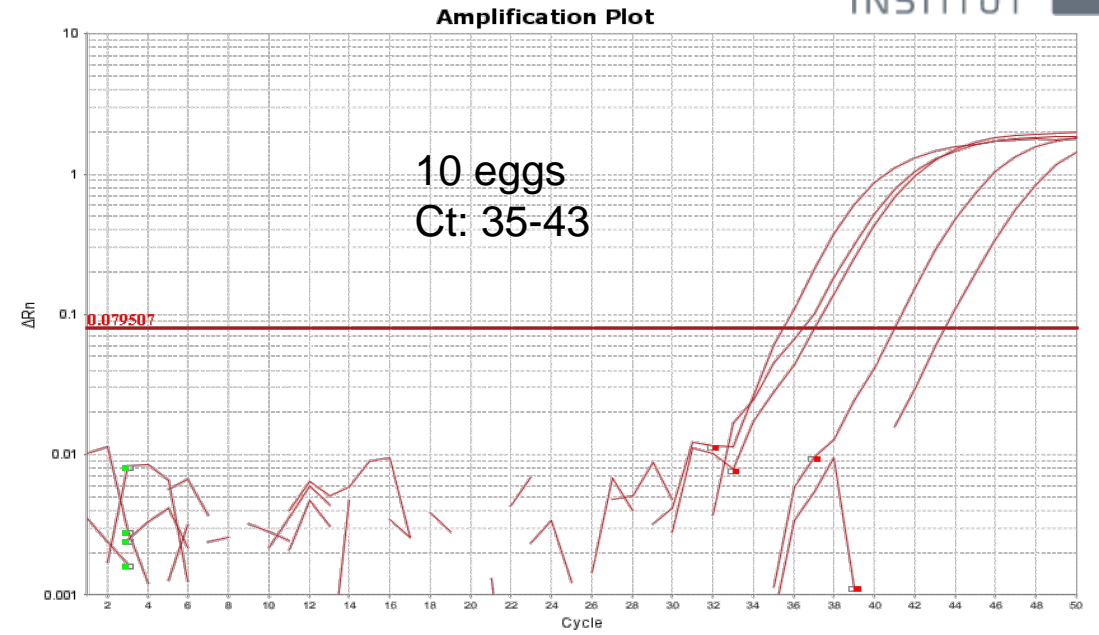
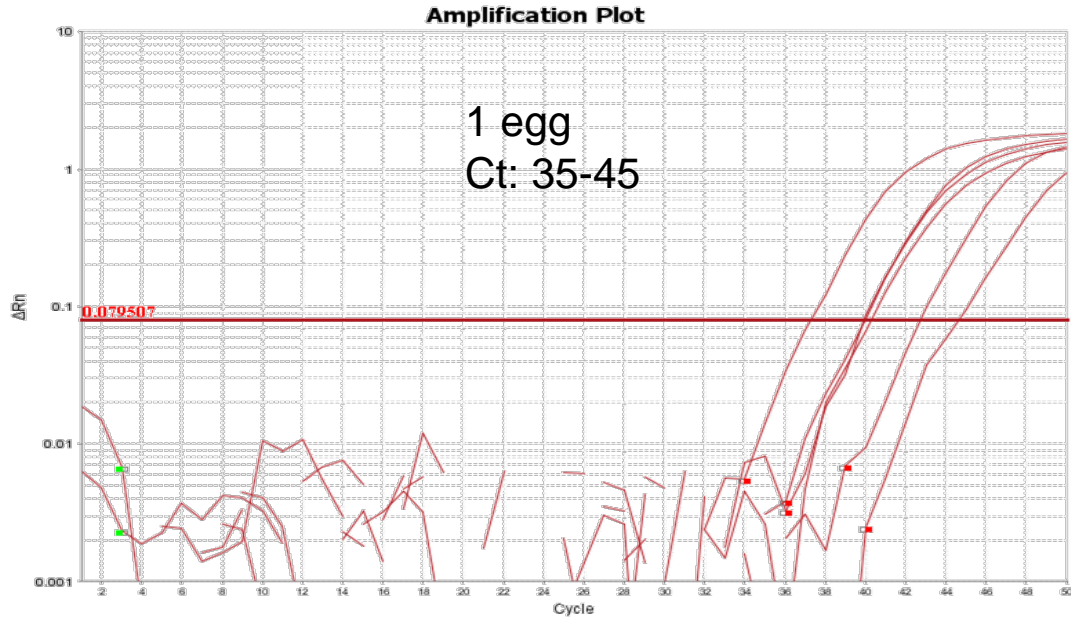
Tested on

- DNA from *E.m.*, *E.g.s.s.* (G1-G3) and *E.g.s.l.* (G4; G5; G7; G10)
- Fox fecal samples spiked with *E.m.*
- DNA from other helminths for cross-reaction testing

Issues

- Do not catch G10 (*E. canadensis*, reindeer)
- G4 (*E. equinus*) on *E.g.s.s.* probe
- High Ct-values

FOX FECAL SAMPLES SPIKED WITH E.M.

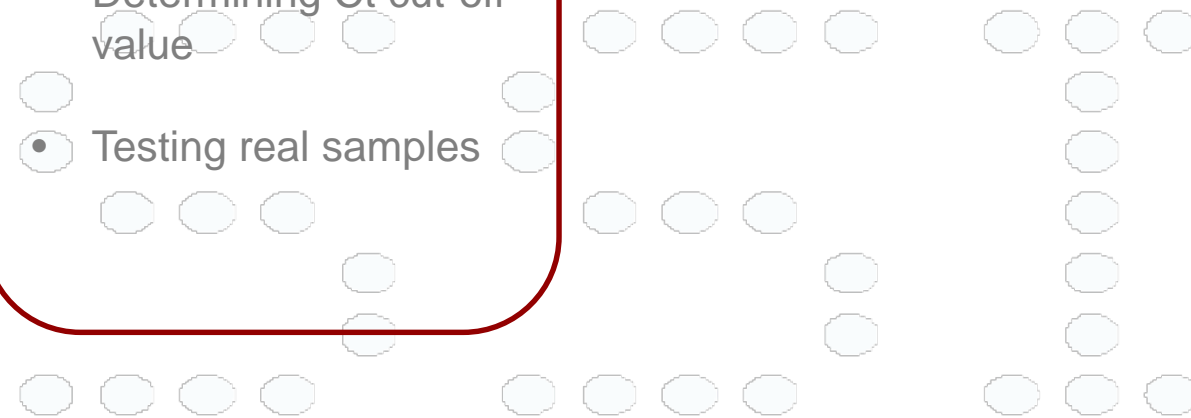


Primers

- Optimize for inclusion of G10
- Investigate options for getting G4 included by the E.g.s.l. probe instead of E.g.s.s.

Sn./Sp. testing

- Testing samples spiked with E.g.s.l. and E.g.s.s.
- Determining the limit of detection
- Determining Ct cut-off value
- Testing real samples



THANK YOU

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