

Copy of How to work with *Cryptosporidium* - guide to detection and typing methods



The following course will give a brief introduction in *Cryptosporidium* detection and typing methods and guide you through some possibilities!

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Made in 2023

Content of the course

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1

Introduction

A you a brief introduction about the *Cryptosporidium* and it importance from One Health perspective

2

Decision tree

The elaborated decision tree comprehensively presents the current knowledge in the field of *Cryptosporidium* diagnostics, taking into account scientific and practical aspects.

3

Detection of *Cryptosporidium* oocysts – microscopy

The conventional microscopy methods which have been extensively used for the detection of *Cryptosporidium* oocysts in faecal, surface and drinking water, food, environmental samples.

4

Detection of *Cryptosporidium* – molecular methods

Molecular methods offers several advantages over conventional methods and has been used extensively for the *Cryptosporidium* detection.

5

***Cryptosporidium* species determination and subtyping**

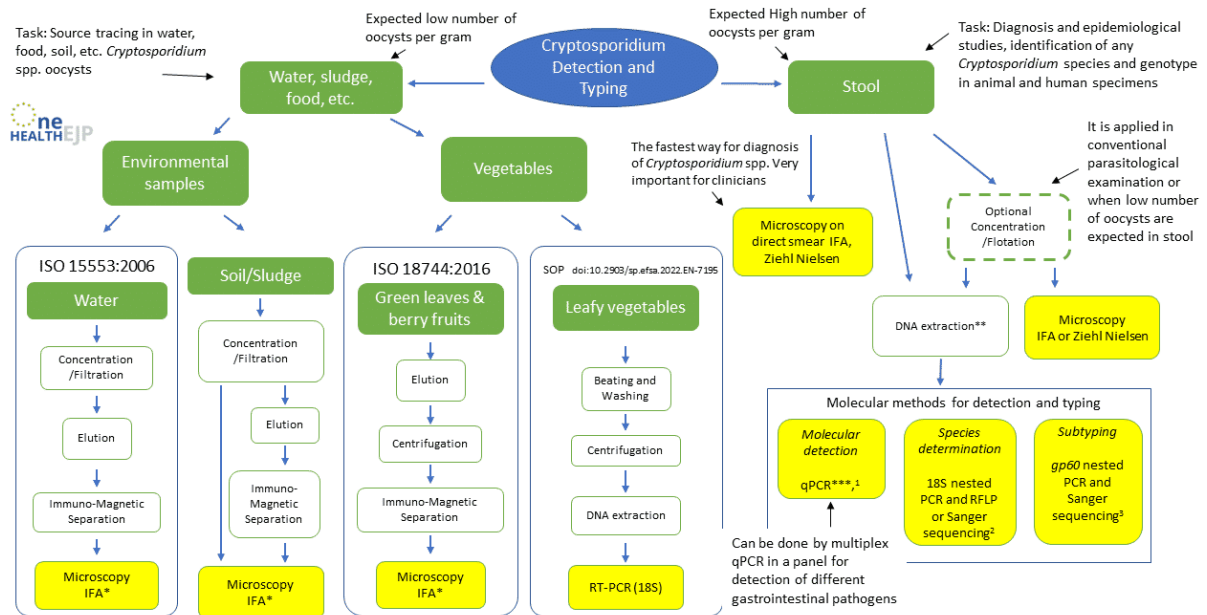
Currently there are 42 *Cryptosporidium* species described and many genotypes awaiting species status and almost all *Cryptosporidium* species oocysts look the same morphologically so to be able to know species molecular methods are needed.

6

Excercise

After going through the whole course, now it is time to do some excercise. Here you will find some AB1 files with the gp60 and 18S rRNA *Cryptosporidium* sequences.

i A quick insight of the Decision tree used as a base for this e-course!



* It is possible to go back and do molecular typing

** Many methods available. Usually involves a mechanical disruption of oocysts before DNA extraction.

*** Several different markers used. Commonly 18S for detection of ANY *Cryptosporidium* species