

No detection of *Ophidiomyces ophidiicola* in snakes from “rito dei serpari” of Pretoro (Abruzzi, Italy) showing gross signs of disease



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2



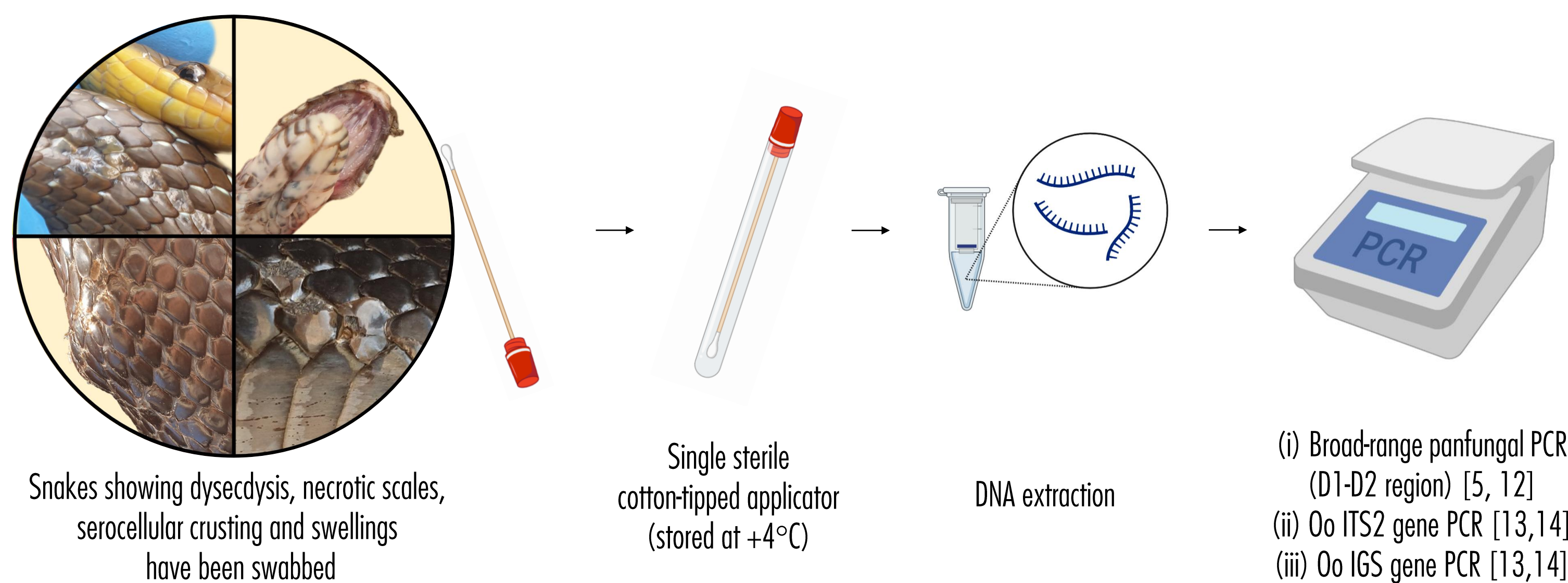
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1. Introduction

San Domenico Abate worship is celebrated annually in Abruzzi (Central Italy) [1,2]. Since the last part of the XIX century, in Pretoro (Chieti) it consists in a competition between wild ophidians captured by snake hunters called “serpari” [3,4]: snake-catchers give their ophidians to a committee that weight their animals. Since 2015, thanks to a consortium, the ritual has been subjected to regulations aimed to protect the ophidians and to instruct snake hunters [3,4]. *Ophidiomyces ophidiicola* (Oo) is an ascomycete fungus, causative agent of ophidiomycosis, an emergent disease [5,6] associated with sublethal effects in adult snakes and potentially lethal effects in newborns and juveniles [7-10]. Skin lesions are the most common presentation of the diseases [11]. In 2019, a preliminary screening for Oo has been performed in Pretoro.

2. Materials & Methods

All snakes underwent clinical examination. All the ones showing signs consistent with ophidiomycosis have been dry swabbed along the skin and cutaneous lesions. Conventional PCRs aimed for 3 different Oo genomic DNA targets.



3. Results

12 out of 61 snakes (19,7%) showed gross signs consistent with Oo infection:



11/49 *Hierophis viridiflavus* (22,4%)



1/8 *Zamenis longissimus* (12,5%)



0/4 *Natrix helvetica* (0%)

No PCRs showed product amplification.

4. Discussion & Conclusion

So far, the presence of Oo genomic DNA from sampled snakes cannot be excluded since the percentage of false negatives resulting from PCR assays with only one swab application may be more than 70% [15]. Improvement of diagnostic methods is in progress.

Oo screenings will be further carried out to scientifically valorize events like Pretoro celebration and its centenary dimension linking religion, human and wildlife.

Abstract:



References:

