

Pythium insidiosum

Classification:

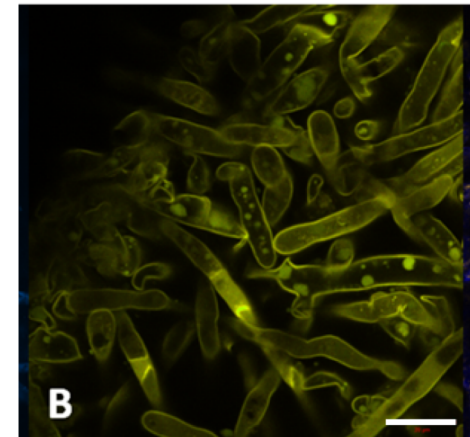
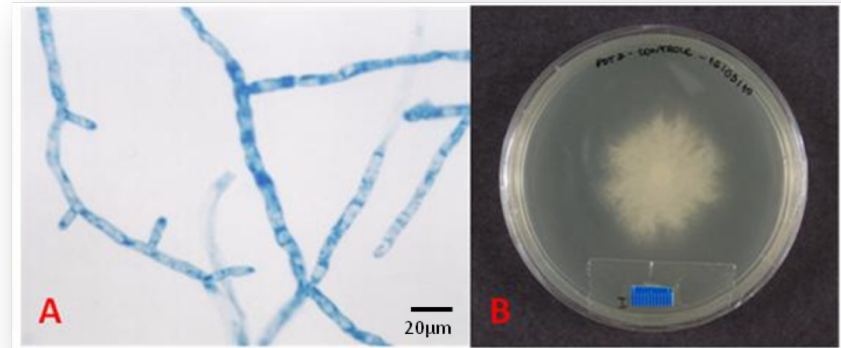
- microorganism similar to fungus;
- oomycete;

Morphology:

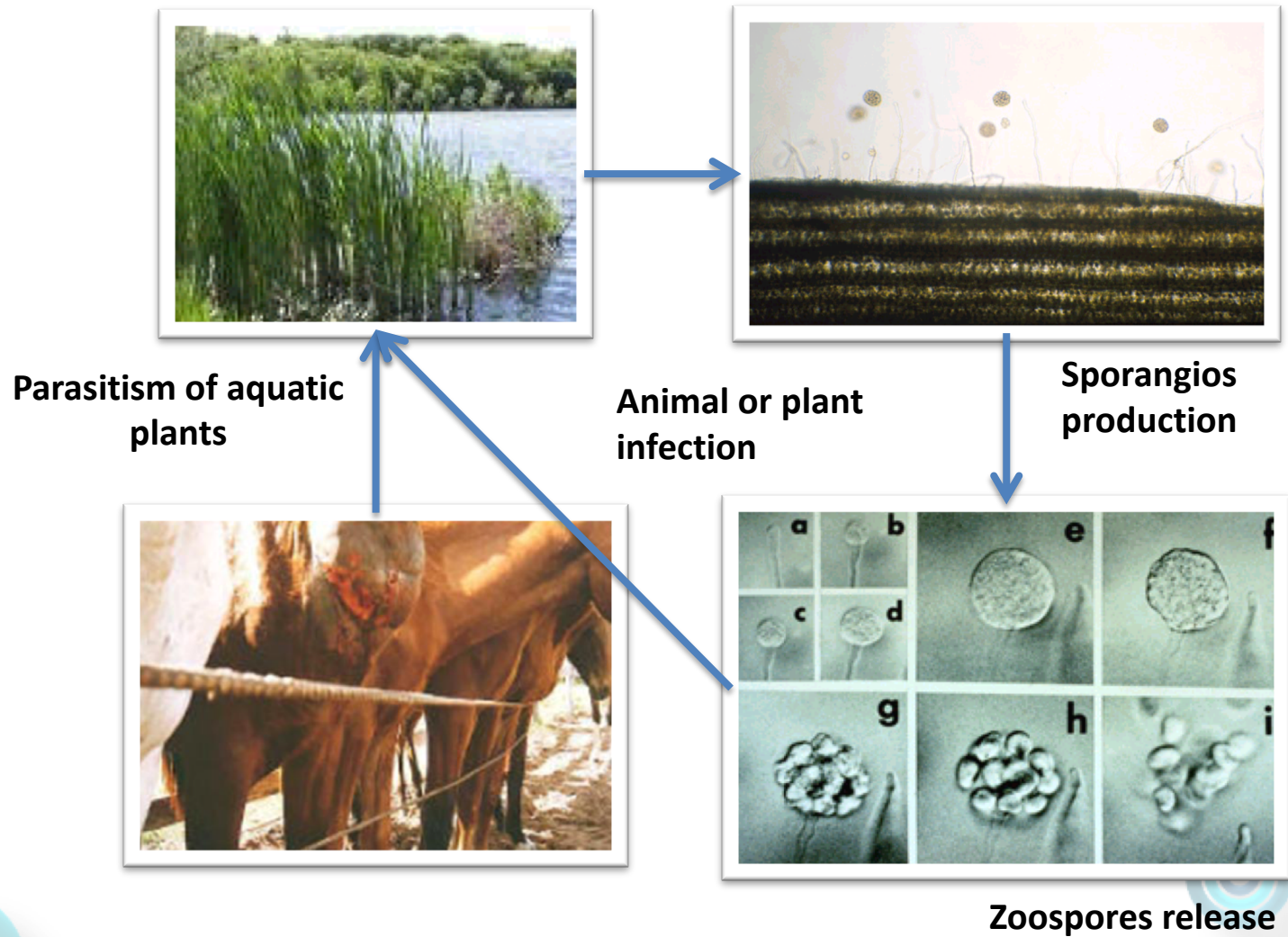
- cylindrical and long hyphae;
- several cell membranes

Organelles:

- multiple mitochondrias;
- cell wall: β -1,3- e β -1,6-glucan and cellulose;
- lack of ergosterol in the cell membrane.



Pythium insidiosum: life cycle



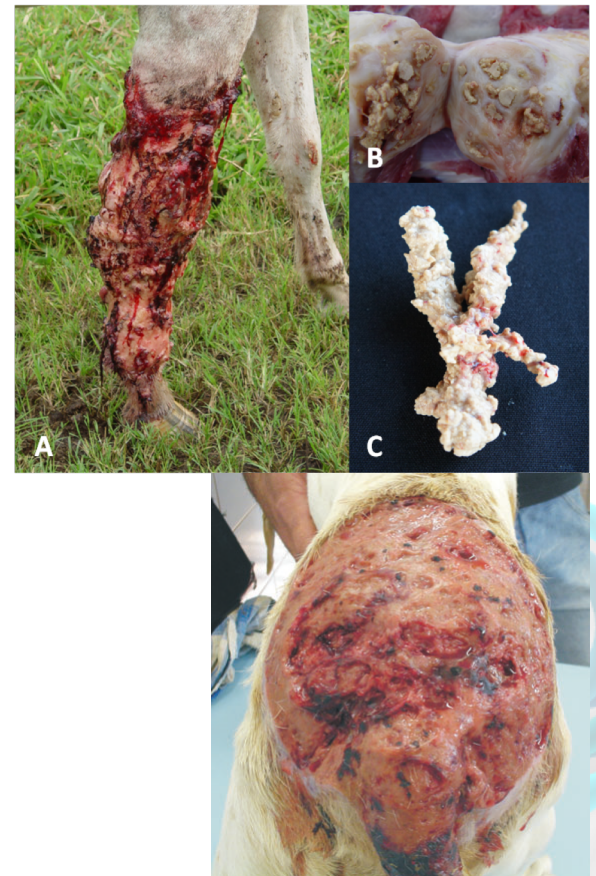
Pythiosis

- Potentially mortal;
- Infected animals: horses, sheeps, dogs, cats, camels, bears, humans and birds.
- In Brazil, ~ 12% of horses in Pantanal are infected;
- In the USA, more than 100 dogs have been diagnosed with pythiosis

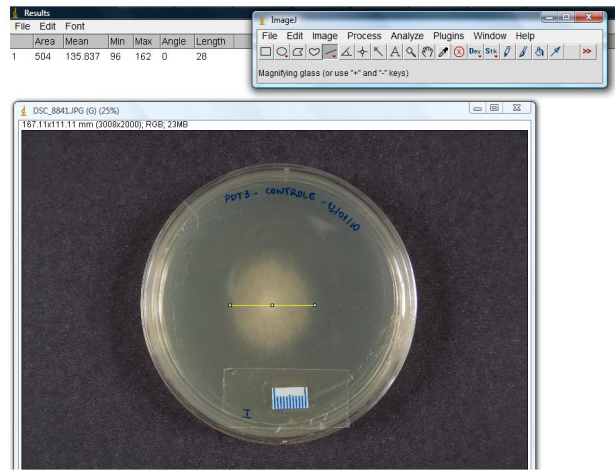
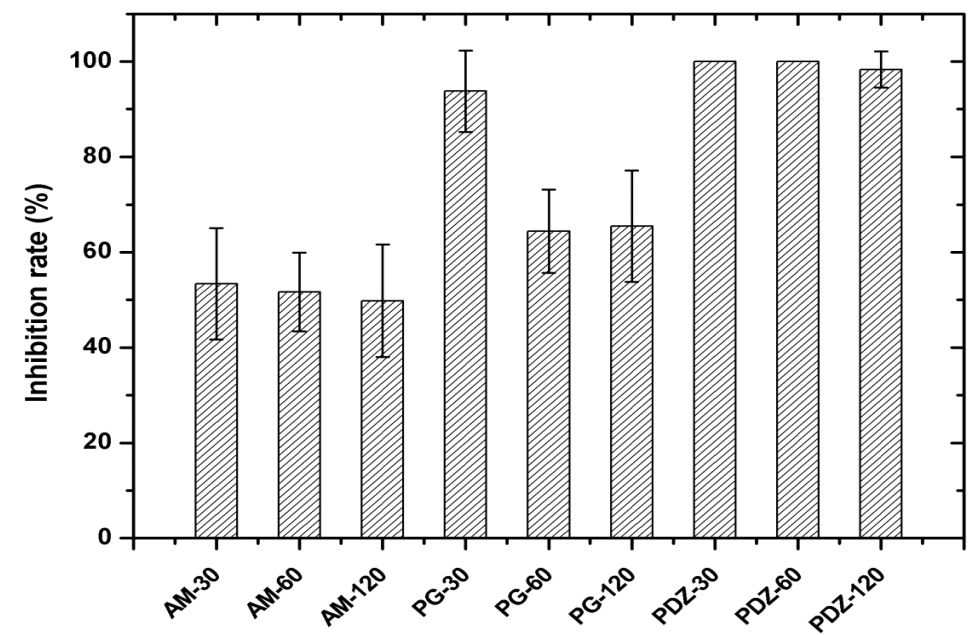
Ulcerative and granulomatous lesion of fast growing rate

Therapeutic options

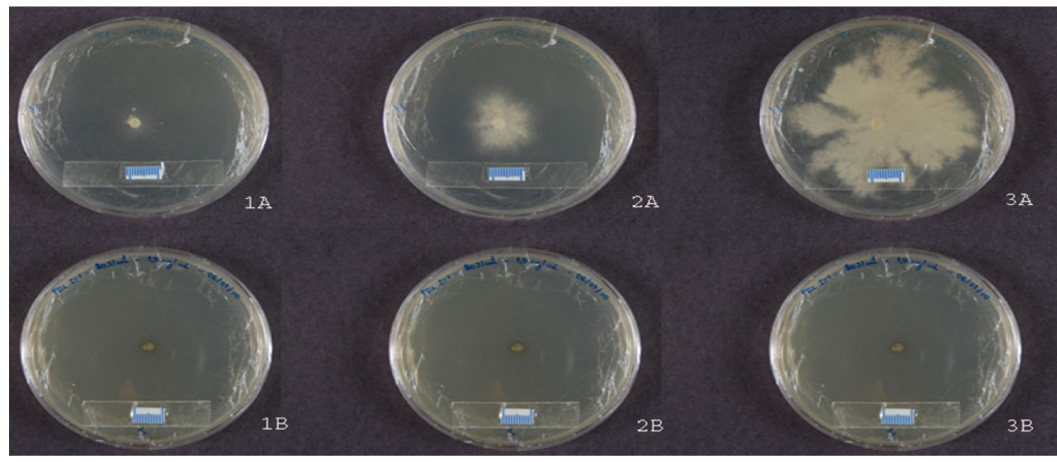
- Surgery
- Immune therapy
- Treatment combinations



Proof of concept – Inibição do crescimento *in vitro*

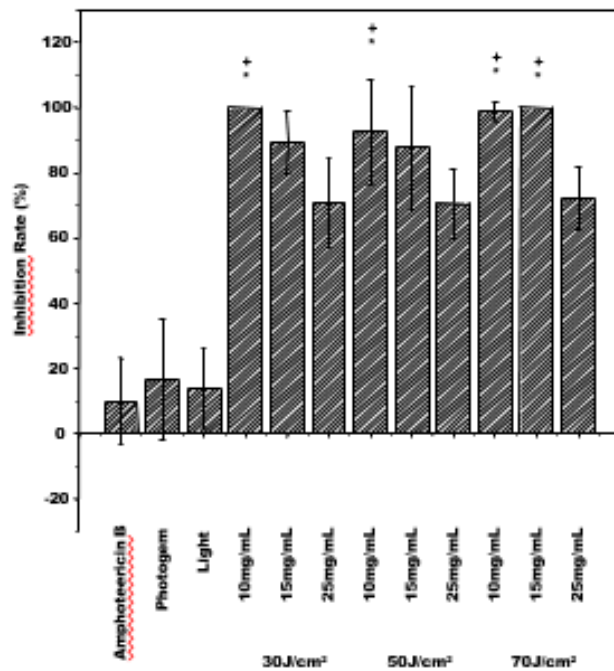


$$TI(\%) = 100 - \left[\frac{(T.100)}{C} \right]$$

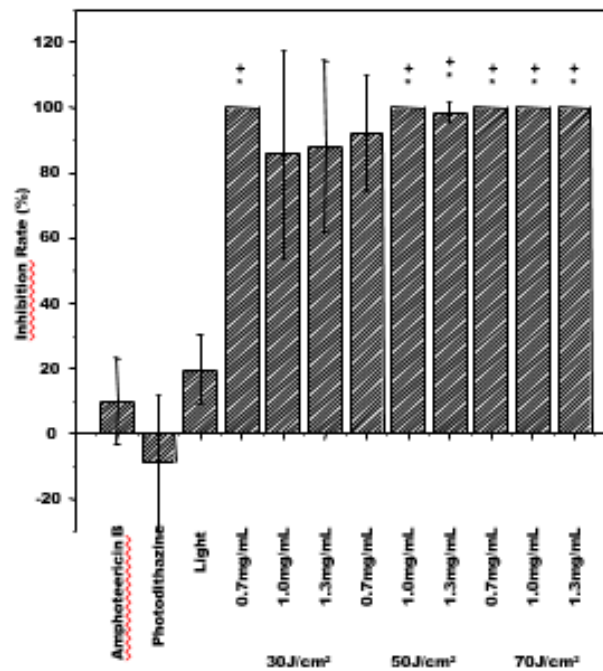


Inhibition rate

Photogem



Photodithazine



Methylene Blue

