

4.3 Miscellaneous Mycotic Diseases

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A. Deuteromycetes

Deuteromycosis is caused by imperfect fungi found in the class Deuteromycetes. Representative genera and reported hosts include:

1. *Cryptococcus* is a yeast reported to be associated with exophthalmos in tench *Tinca tinca*.
2. *Candida sake* is a yeast reported from the gut of Amago trout *Oncorhynchus rhodurus*. Clinical signs are distended stomachs filled with viscous fluid and gas bubbles.
3. *Phoma herbarum* is capable of infecting salmonid fry and fingerlings. Geographic range includes the Pacific Northwest of the United States and Southwest England. Clinical signs reported are swollen and hemorrhaging vents, compressed abdominal areas, caudal petechiae, and loss of equilibrium. The pneumatic duct of the swimbladder is generally the first site of infection and elicits an inflammatory response.
4. *Fusarium* is a form genus in the class Hyphomycetes and has been reported to infect carp, lobster, and other crustaceans. *Fusarium* is associated with "Burn Spot Disease" in lobster and "Black Gill Disease" of prawn in Japan.

B. Dematiaceous Hyphomycetes

The disease condition caused by this group of fungi are commonly known as phaeohyphomycosis or chromomycosis. These fungi are systemic and have pigmented hyphae.

1. *Ochroconis tshawytschae* is pathogenic to young chinook salmon. The major infection site is the posterior kidney.
2. *Ochroconis humicola* is pathogenic to coho salmon, rainbow trout, and frogs. A major site of infection is the kidney. Disease signs may include enlarged abdomen, small ulcers, hemorrhaging, edema, and exophthalmus.
3. *Exophiala* has been reported to infect brain tissue of channel catfish (non-proliferative or proliferative granulomatous) and trout (exophthalmos and cranial ulcers) or the kidneys (inflammatory, necrotic and granulomatous) of Atlantic salmon.

References

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