



PRAKTIKUM PARASITOLOGI 1

Sodikin Kurniawan

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PERTEMUAN 6

F. hepatica, E. malayanum, E. ilocanum

Lecture prepared by Sodikin Kurniawan, Muhammadiyah University of Semarang



Trematode

Flukes / leaf-shaped worm

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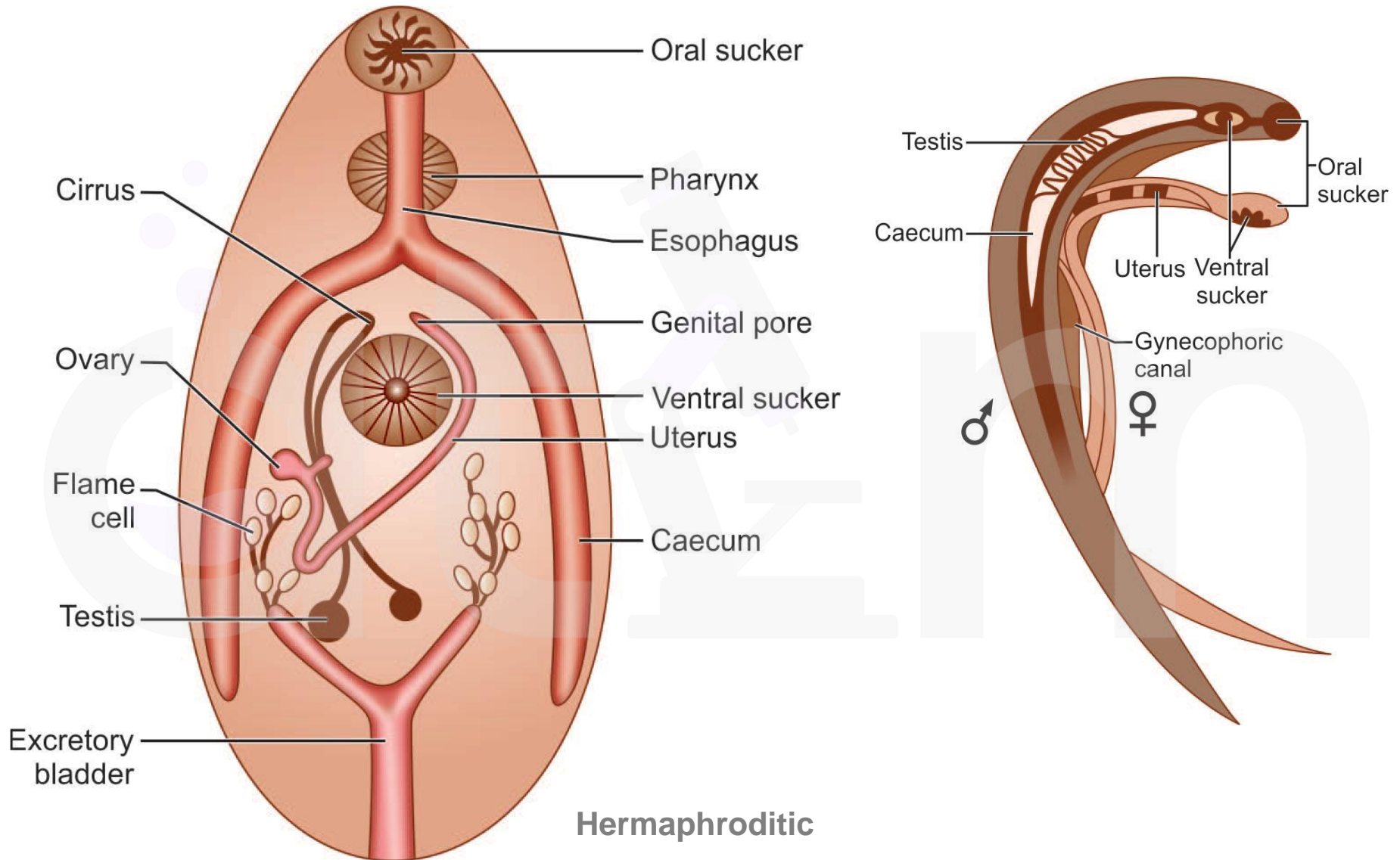
Classification of Termatodes

Superfamily	Family	Genus	Species
Schistosomatoidea	Schistosomatidae	Schistosoma	S. haematobium
			S. mansoni
			S. japonicum
Echinostomatoidea	Echinostomatidae	Echinostoma	E. ilocanum
			E. malayanum
Fascioloidea	Fasciolidae	Fasciola Fasciolopsis	F. hepatica
			F. buski
Opisthorchioidea	Opisthorchiidae	Clonorchis	C. sinensis
Plagiorchioidea	Paragonimidae	Paragonimus	P. westermani

Classification based on Habitat

Habitat	Trematodes
Blood (Blood fluke)	Schistosoma haematobium (In the vesical and pelvic venous plexuses)
	Schistosoma mansoni (In the inferior mesenteric vein)
	Schistosoma japonicum (In the superior mesenteric vein)
Biliary tract (Liver fluke)	Clonorchis sinensis
	Fasciola hepatica
	Opisthorchis spp.
Gastrointestinal tract (Intestinal fluke)	Fasciolopsis buski
Small intestine	Heterophyes heterophyes
	Metagonimus yokogawai
	Watsonius watsoni
Large intestine	Gastrodiscoides hominis
Respiratory tract (Lung fluke)	Paragonimus westermani

Trematodes Morphology





Fasciola hepatica

Sheep liver fluke

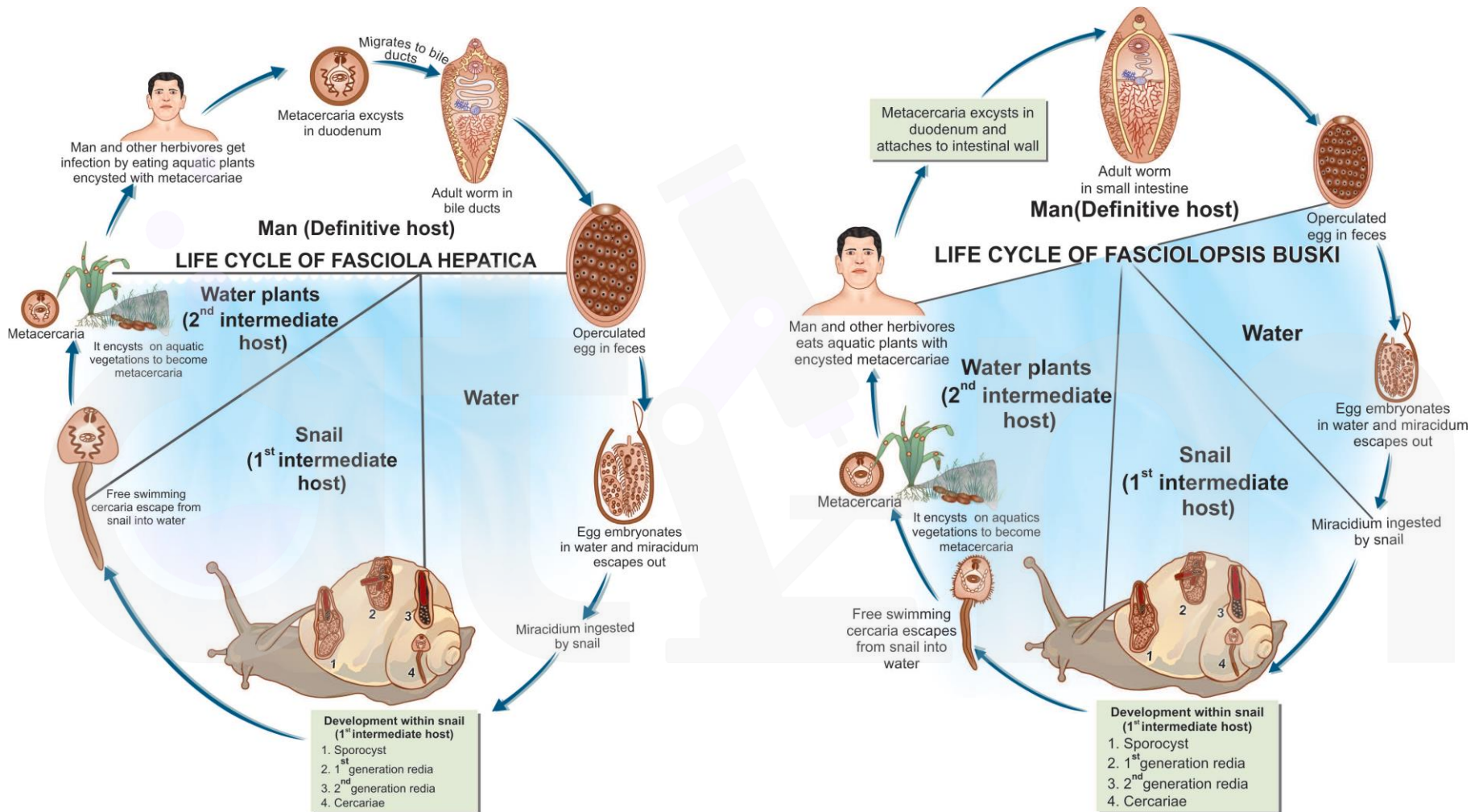
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Fasciola hepatica

Taxonomy

- [Phylum] *Platyhelminthes* Gegenbaur, 1859 – flatworms
- Subclass *Digenea*
- Order *Echinostomida* LaRue, 1957
- Suborder *Echinostomata*^T Szidat, 1939
- Superfamily *Fascioloidea*
- Family *Fasciolidae*^T Railliet, 1895
- Genus [*Fasciola*]^T Linnaeus, 1758
- *Fasciola hepatica* Linnaeus, 1758

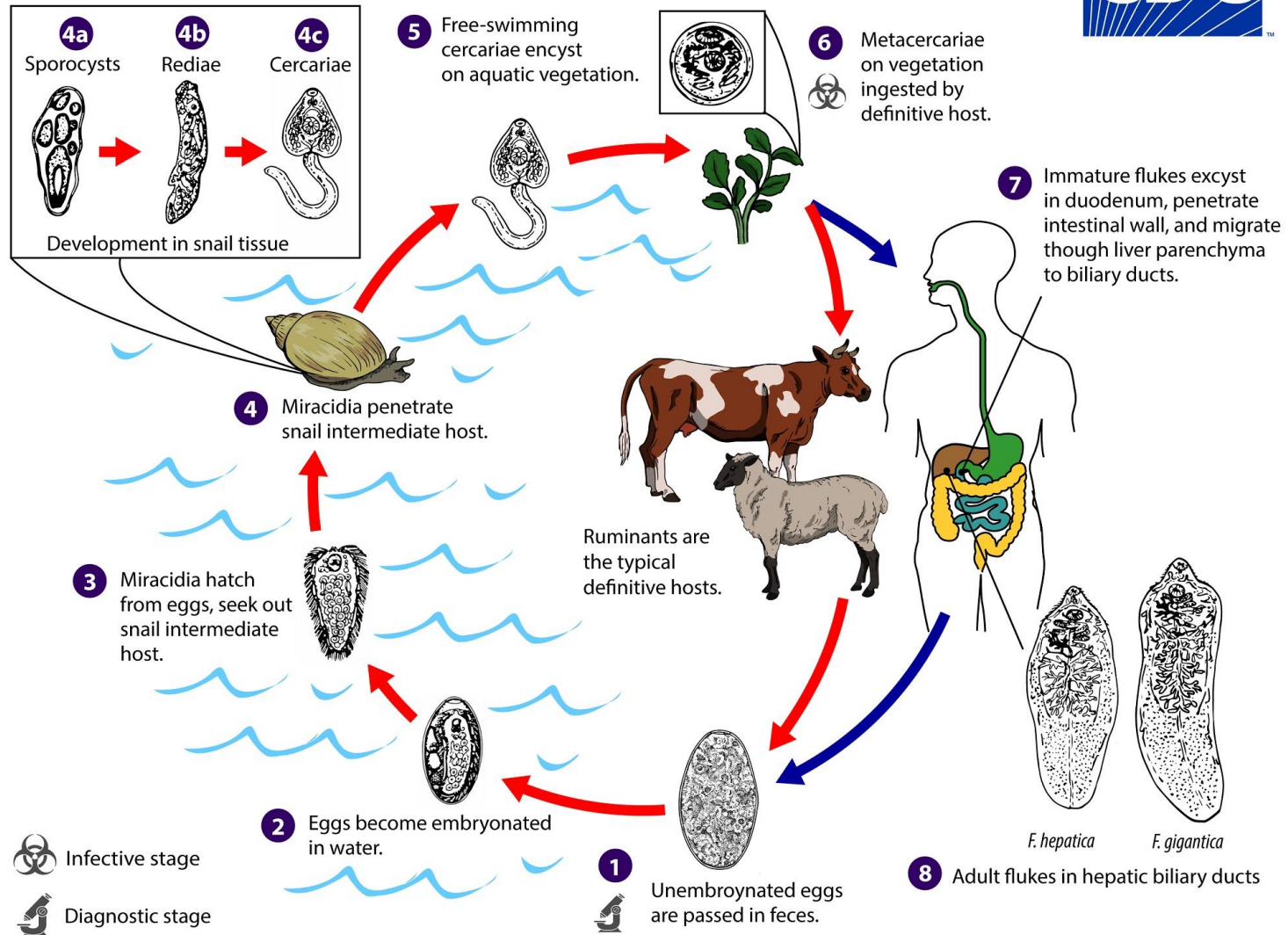
Fasciola hepatica & *Fasciolopsis Buski*



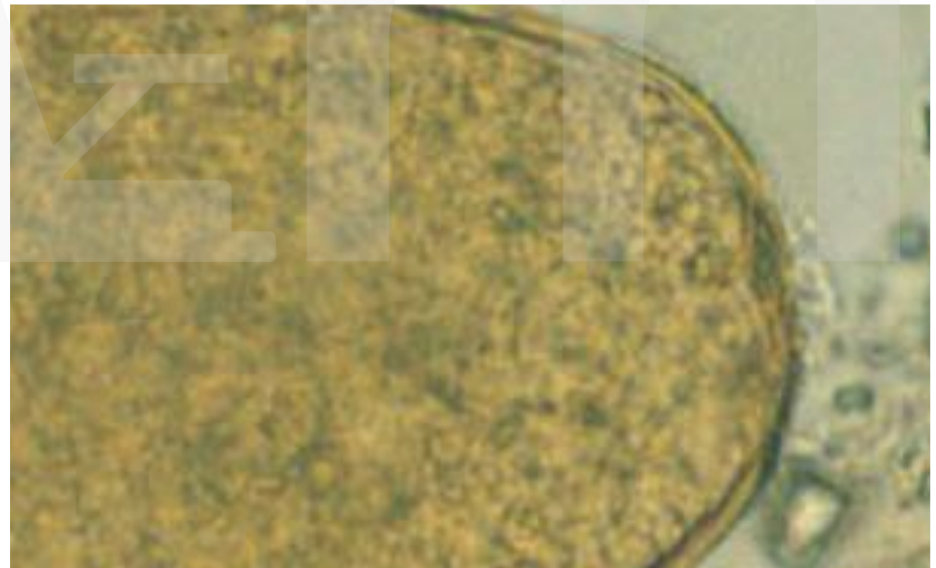
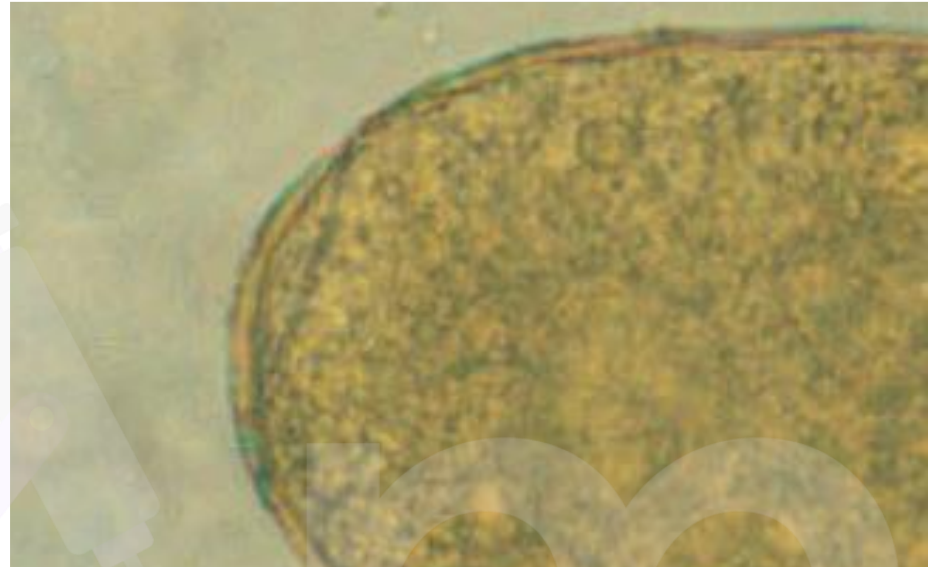
Fasciola hepatica - Sheep liver fluke



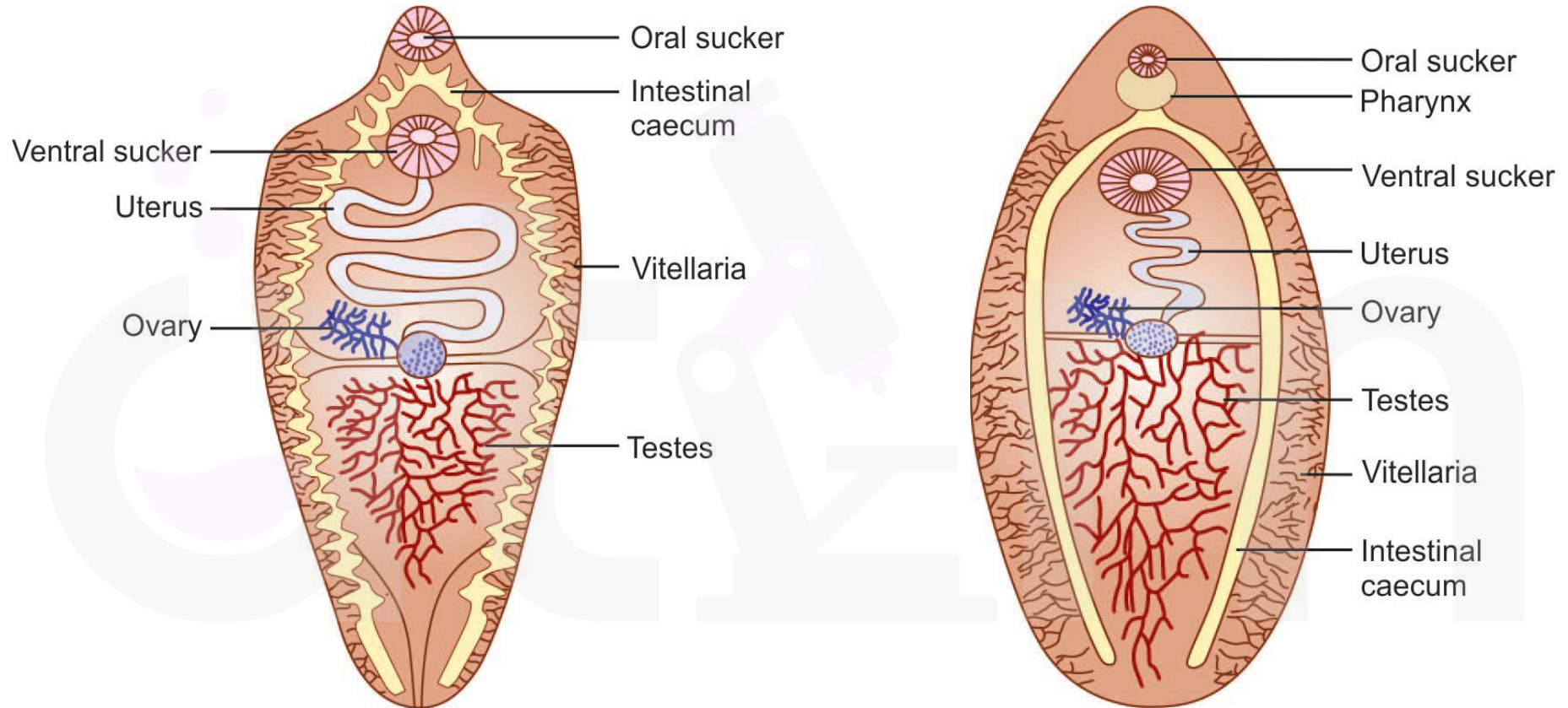
Fasciola spp.



F.hepatica - Egg



F.hepatica VS *F.buski* – Morphology



F.hepatica VS *Fasciolopsis Buski* – Dewasa



F.hepatica – Dewasa





Echinostoma sp.

Echinostoma ilocanum & Echinostoma malayanum

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Echinostoma sp.

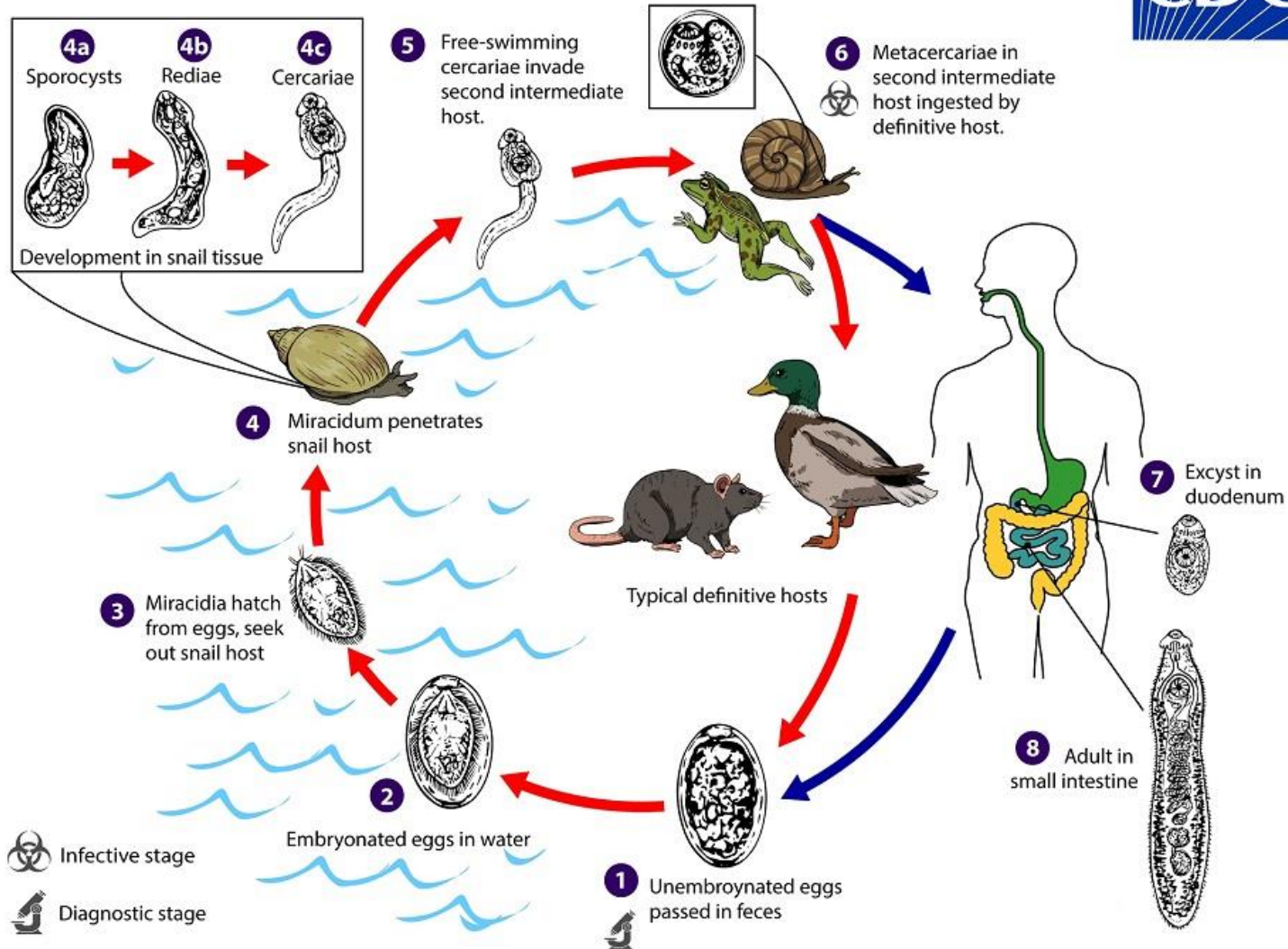
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- *Superfamily Echinostomatoidea*^T
- *Family Echinostomatidae*^T Looss, 1902
- *Genus [Echinostoma]*^T Rudolphi, 1809

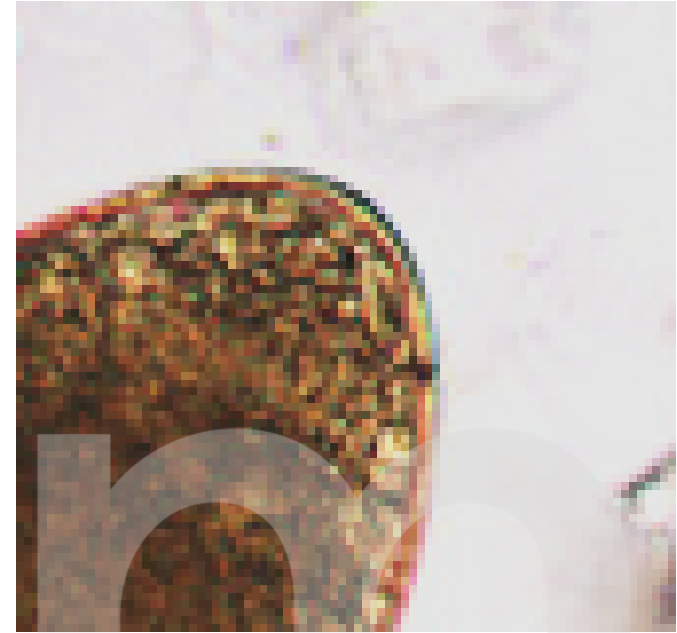
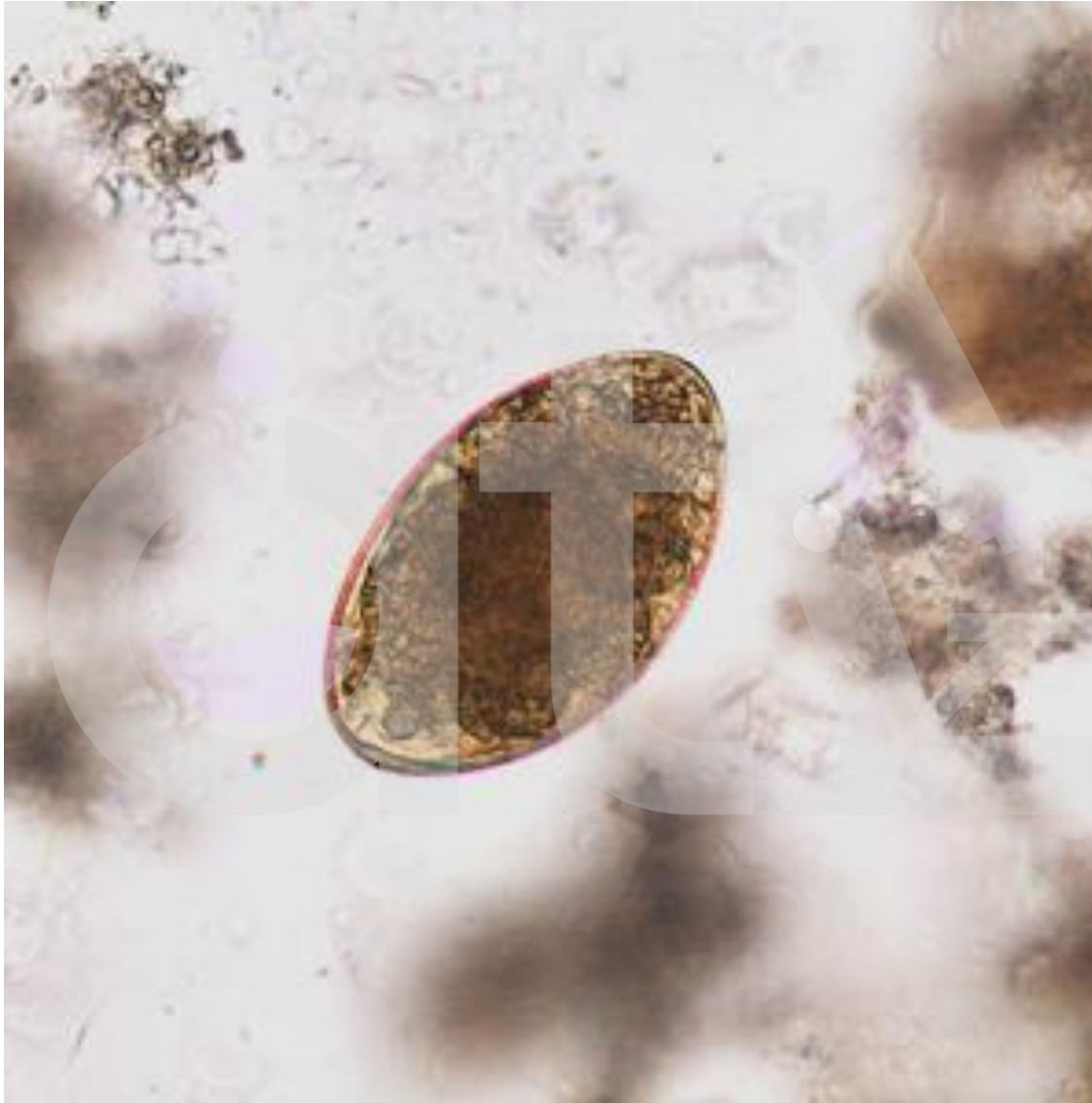
Echinostoma sp.

DPDx

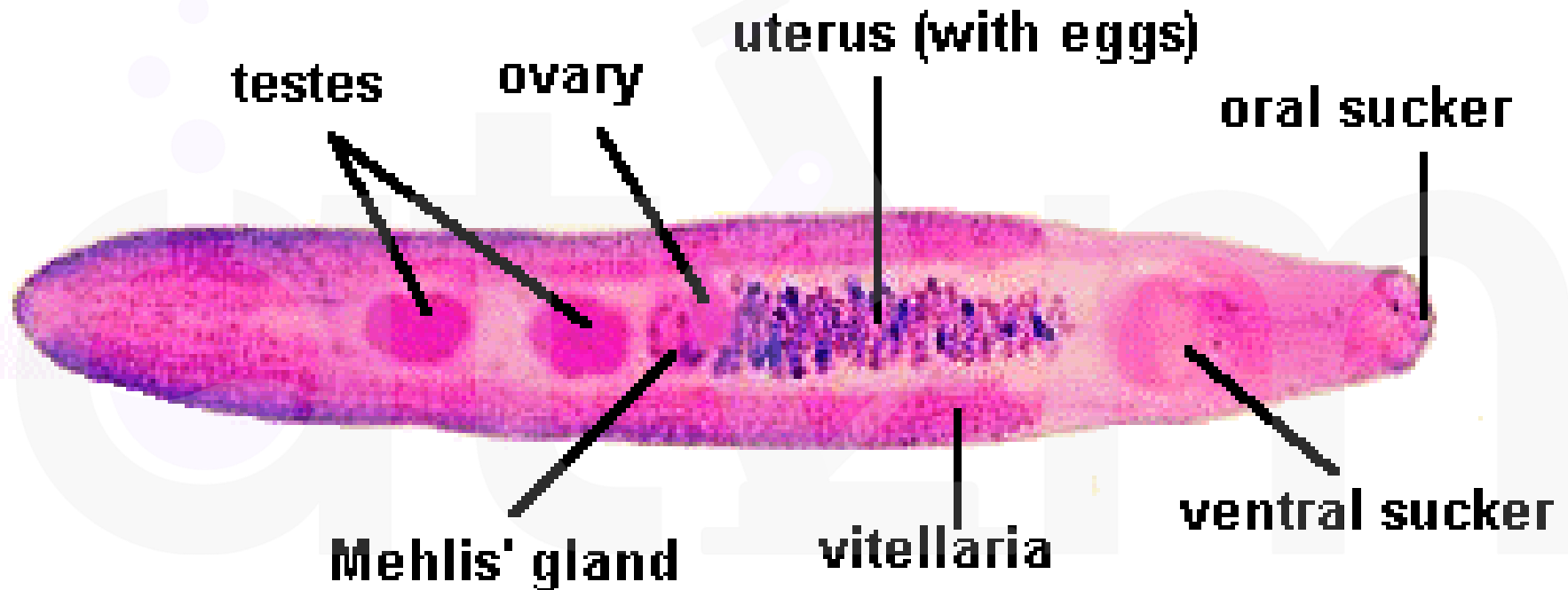
Echinostomid Flukes



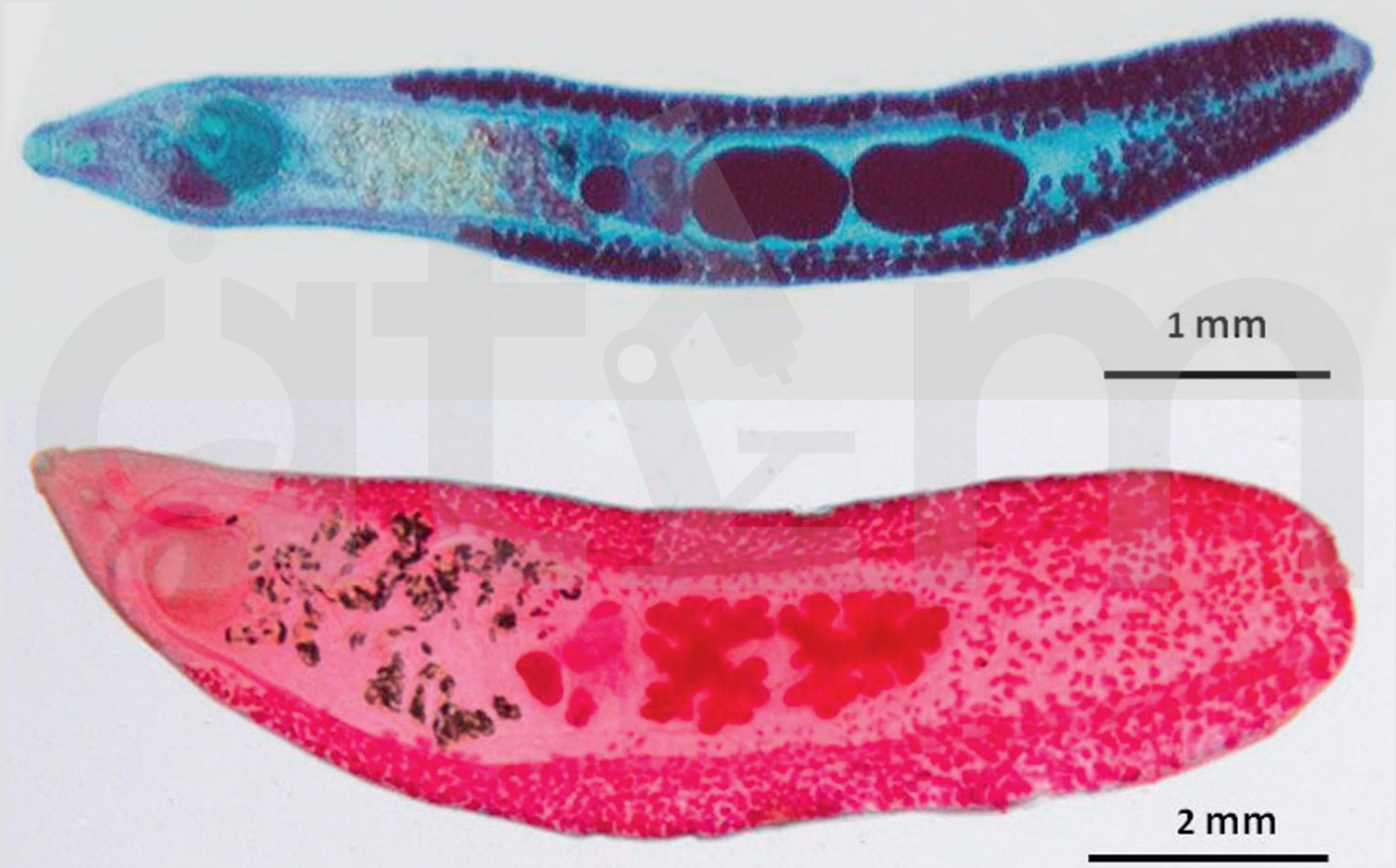
Echinostoma sp. Egg



Echinostoma sp. Morphology



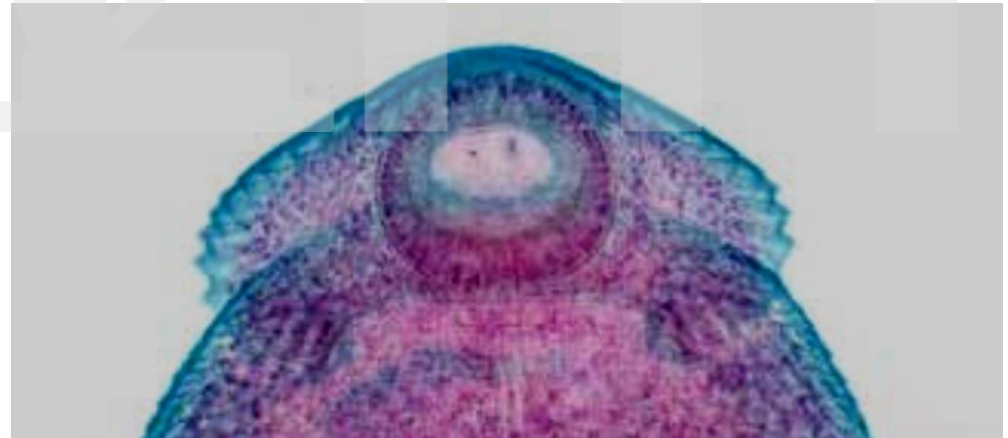
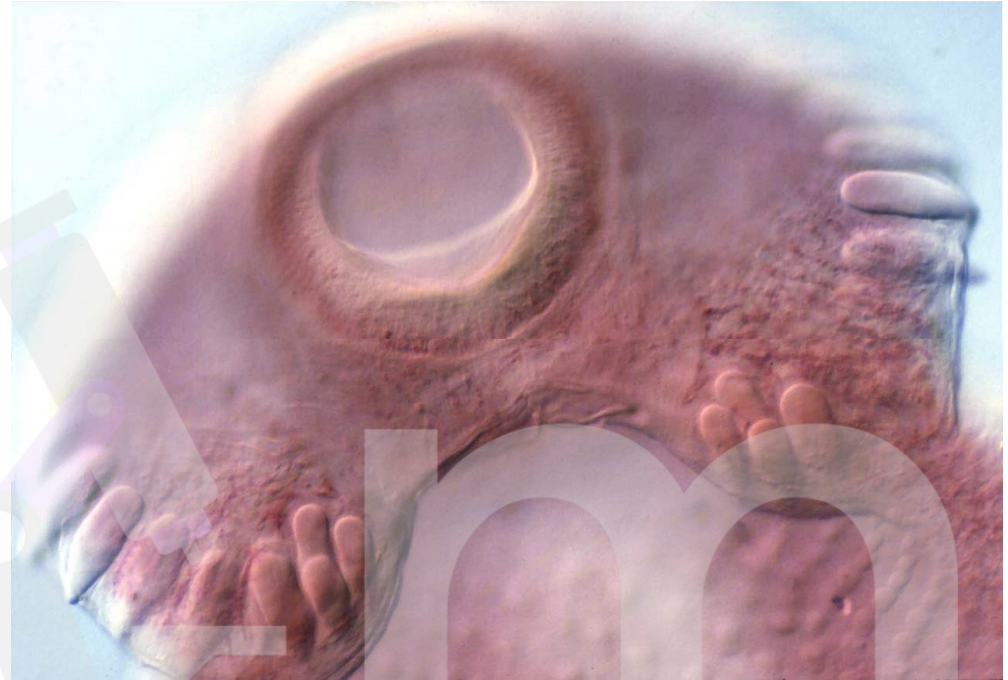
E.ilocanum VS *E.malayanum*



Echinostoma sp. Head



Echinostoma sp. – Circumoral disc & Collar spines





TERIMA KASIH

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