

Al-Mustaqbal University college
Department of pharmacy

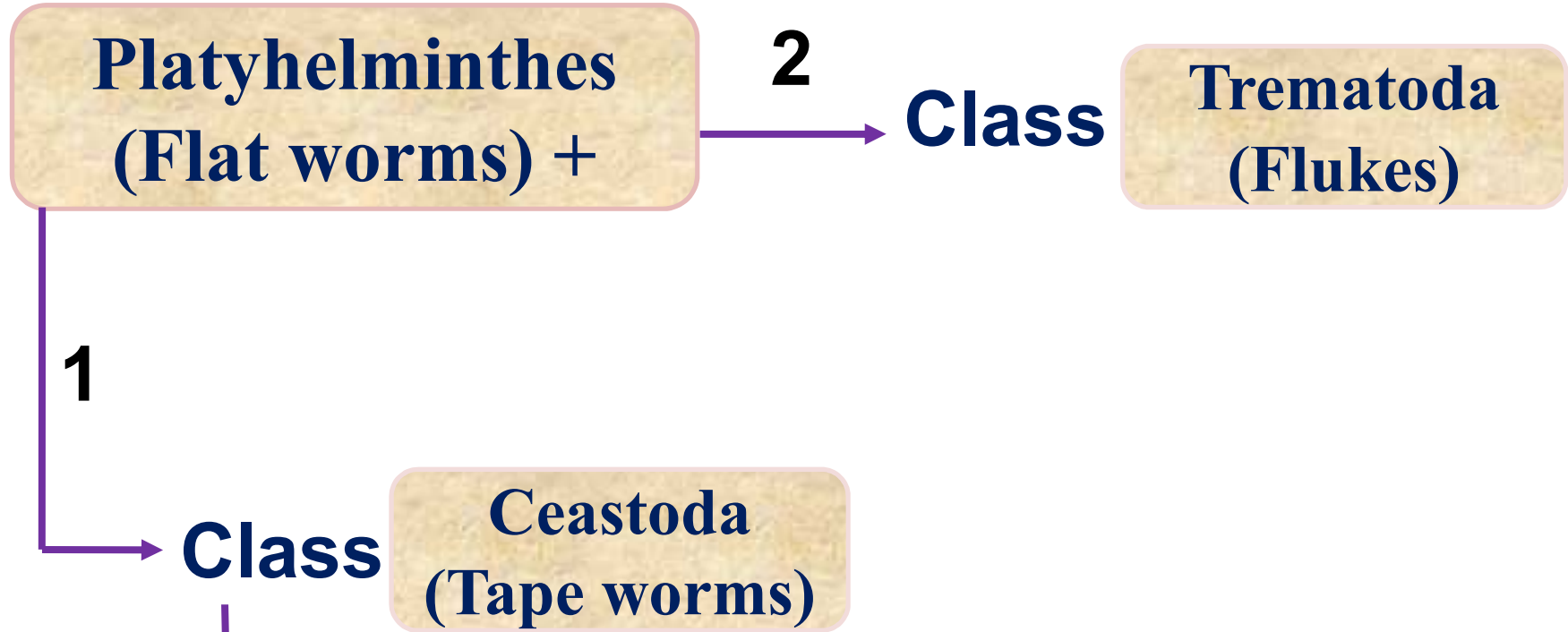


2st Class, 2st Semester

PARASITOLOGY

Lab : 5

Asst. Lec. Mariam A. Ali



Genus : **Echinococcus**

Species :

1/ Echinococcus. granulosus المثنائيه

2/ Echinococcus. multilocularis المصيبه للسان وسقف الفم

3/ Taenia solium

4/ Taenia saginata

General Characters

- **Tape** shaped.
- Adult worm composed of:-
 - a. Rounded scolex with appendages for attachment (e.g. Suckers ماصات or hooked كلاب rostellum).
 - b. Neck (region of growth).
 - c. Strobillum (composed of 3- 4000 segments [proglottide]).
- Length varies between 3mm-10m.



- All cestodes are hermaphrodite
(Each segment contains male & female reproductive system).
- No body cavity.
- No digestive tract.
- No vascular system.
- 1- Habitat:
 - a. Adult worms live in small intestine of their definitive hosts.
 - b. Larval stage found in intermediate hosts tissues.
- Eggs are diagnostic stage
(Spherical, with shell embryonic membranes for embryo protection the embryo [onchosphere] carries 6 elongated hooks [hexacanth])

▪ Replication is either by self-fertilization or by cross fertilization.

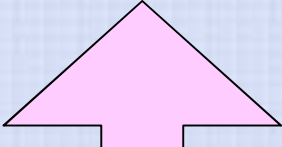
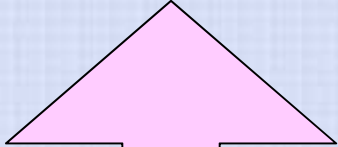
▪ Usually the presence of adult worms in the host intestine **does not produce serious symptoms**, but severe and sometimes fatal symptoms may occur due to presence of the **larval stage** in the host tissues

(e.g. *Taenia solium* & *Echinococcus granulosus*)

Taenia solium & Taenia saginata

	Taenia solium	Taenia saginata
Disease:	<ul style="list-style-type: none">• Taeniasis• Cysticercosis	<ul style="list-style-type: none">• Taeniasis
Habitat:	<ul style="list-style-type: none">• Adult: Small intestine of man• Larva: As cysticercus in pigs muscles or in human tissues.	<ul style="list-style-type: none">• Adult: Small intestine of man• Larva: As cysticercus in beef muscles.

	Taenia solium	Taenia saginata
Definitive host:	Human	
Intermediate host:	Pigs (human is also a dead end intermediate host)	Cattle, sheep & various herbivores

	Taenia solium	Taenia saginata
Diagnostic stage:	<ul style="list-style-type: none"> ■ In case of Taeniasis: <ul style="list-style-type: none"> * Eggs and active gravid segments in stool. 	
	 Eggs	 Gravid Segments
	<ul style="list-style-type: none"> • Spherical • Hexacanth embryo • Radially striated embryophore 	<ul style="list-style-type: none"> * Appears <ul style="list-style-type: none"> • in stool • perianal regions • underclothing * Disintegrate to liberate egg