



HOMOSPOROUS VS HETEROSPOROUS

HOMOSPOROUS

HOMOSPOROUS



HOMOSPOROUS

1 SPORANGIUM FORM

HOMOSPOROUS



HOMOSPOROUS

1 SPORANGIUM FORM

1 SPORE FORM

HOMOSPOROUS

L



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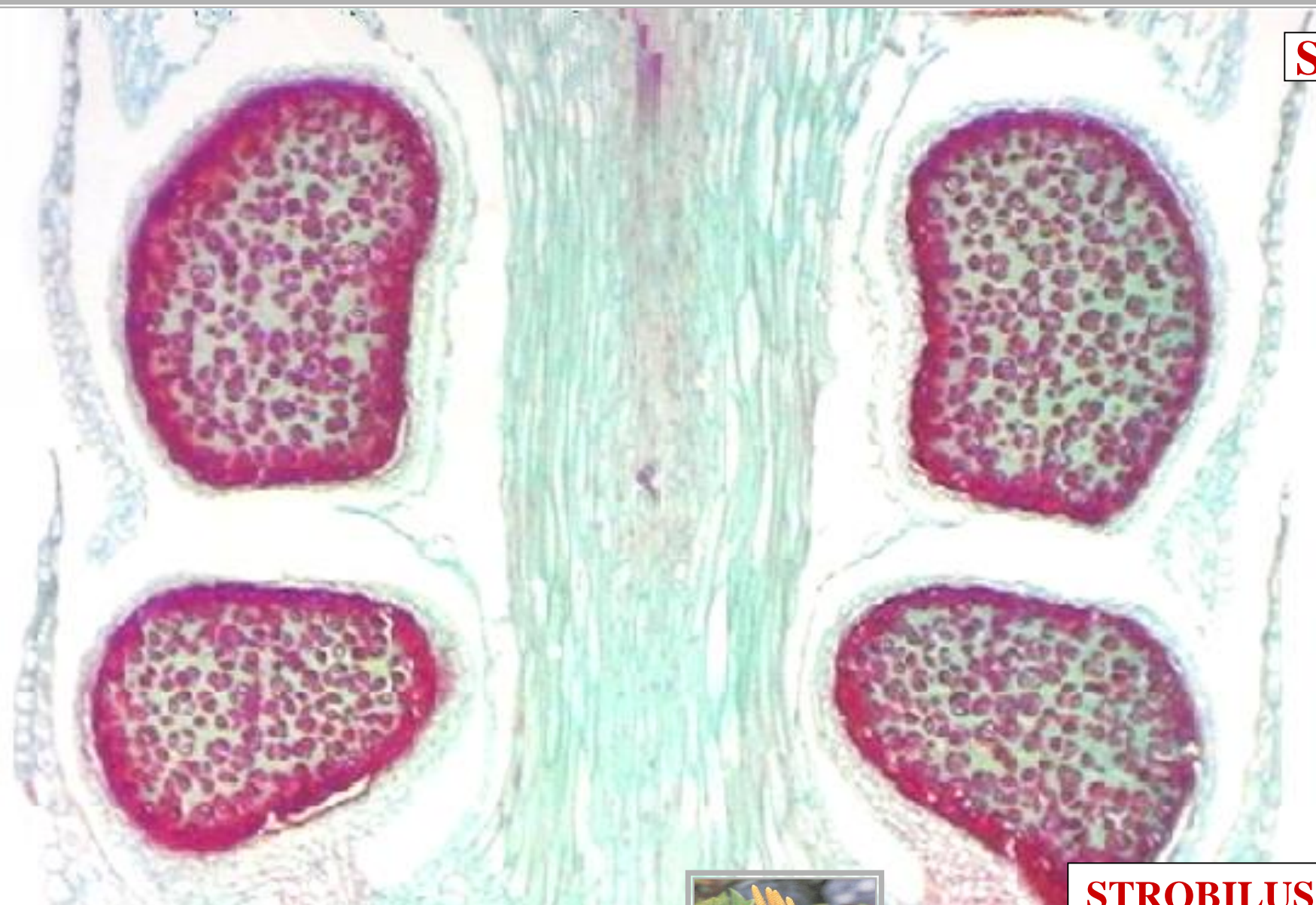


STROBILUS



LYCOPODIUM

S



LYCOPODIUM



STROBILUS

L.S.



SPORANGIUM



STROBILUS

LYCOPODIUM



L.S.

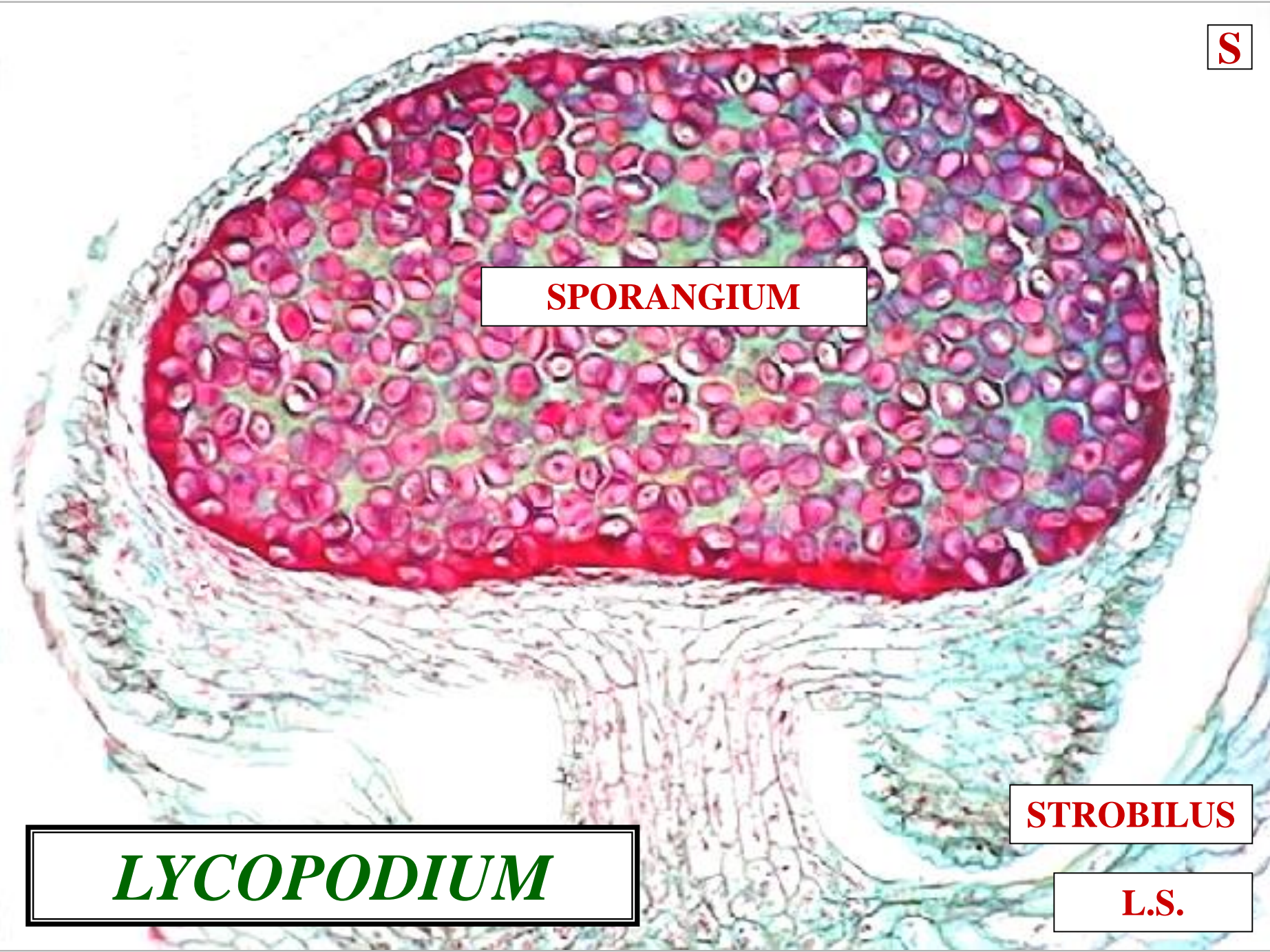
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SPORANGIUM

STROBILUS

LYCOPODIUM

L.S.



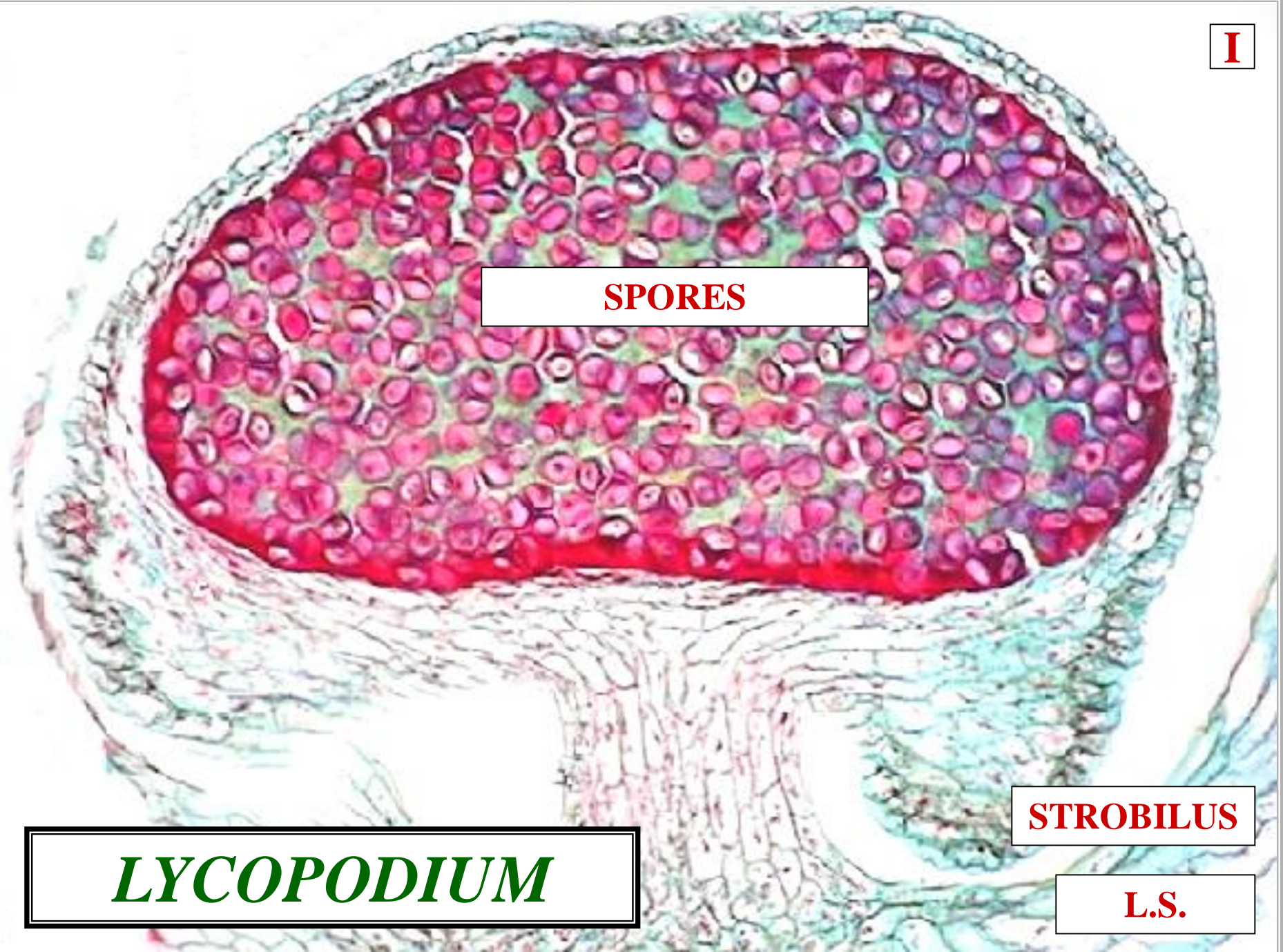
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SPORES

STROBILUS

LYCOPODIUM

L.S.



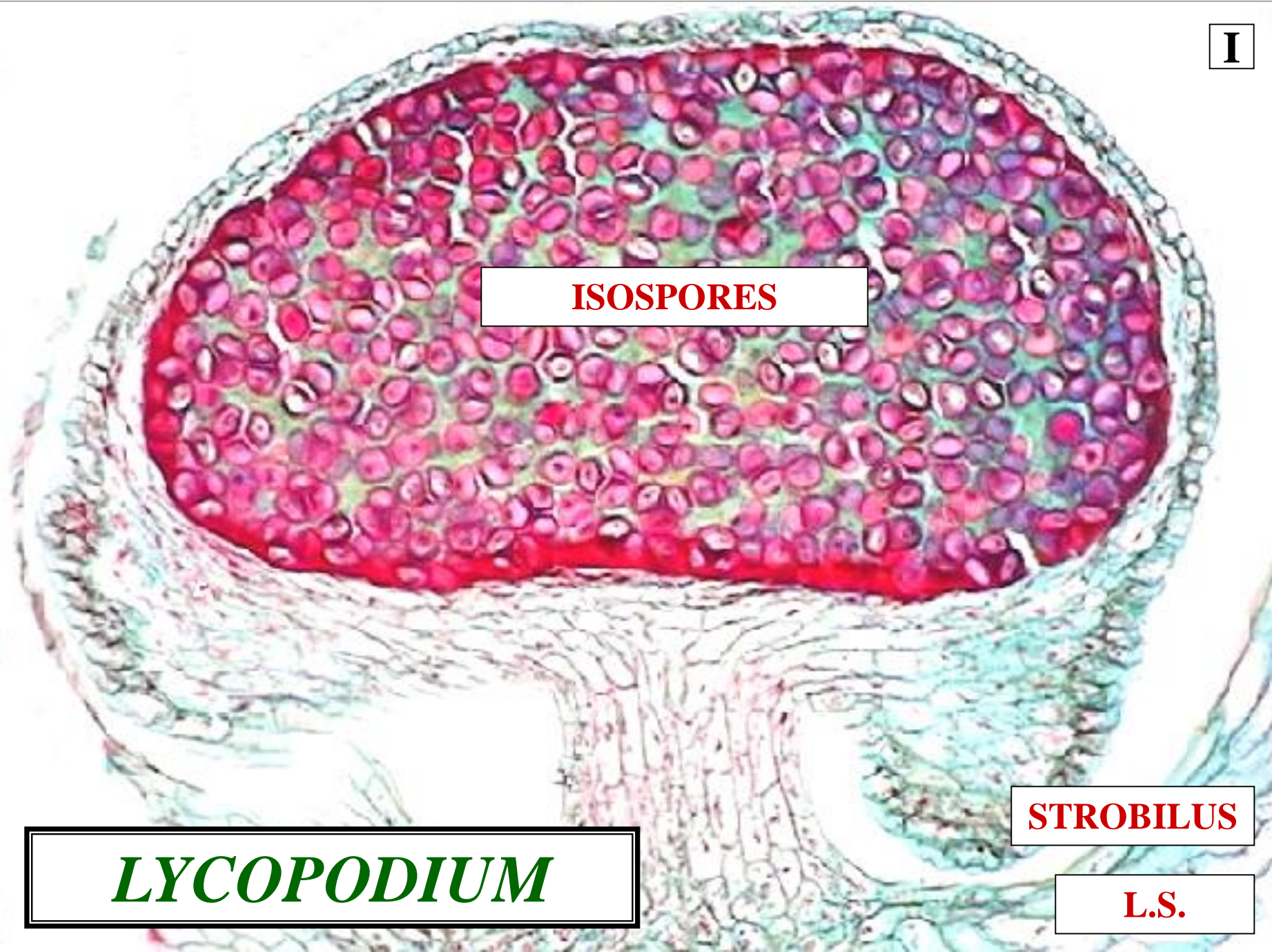
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ISOSPORES

STROBILUS

LYCOPODIUM

L.S.



ISOSPORES



ISOSPORES

EQUAL SIZE

ISOSPORES

**SPOROPHYTE
STROBILUS**

LYCOPODIUM

M

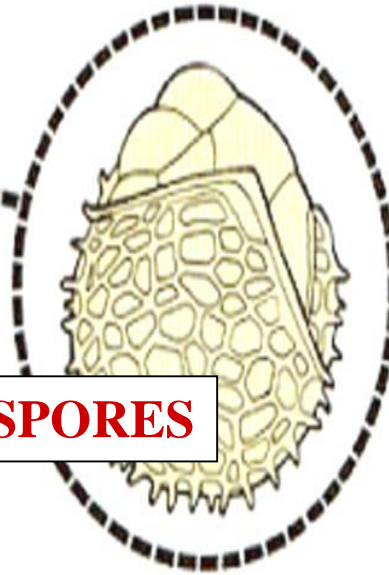
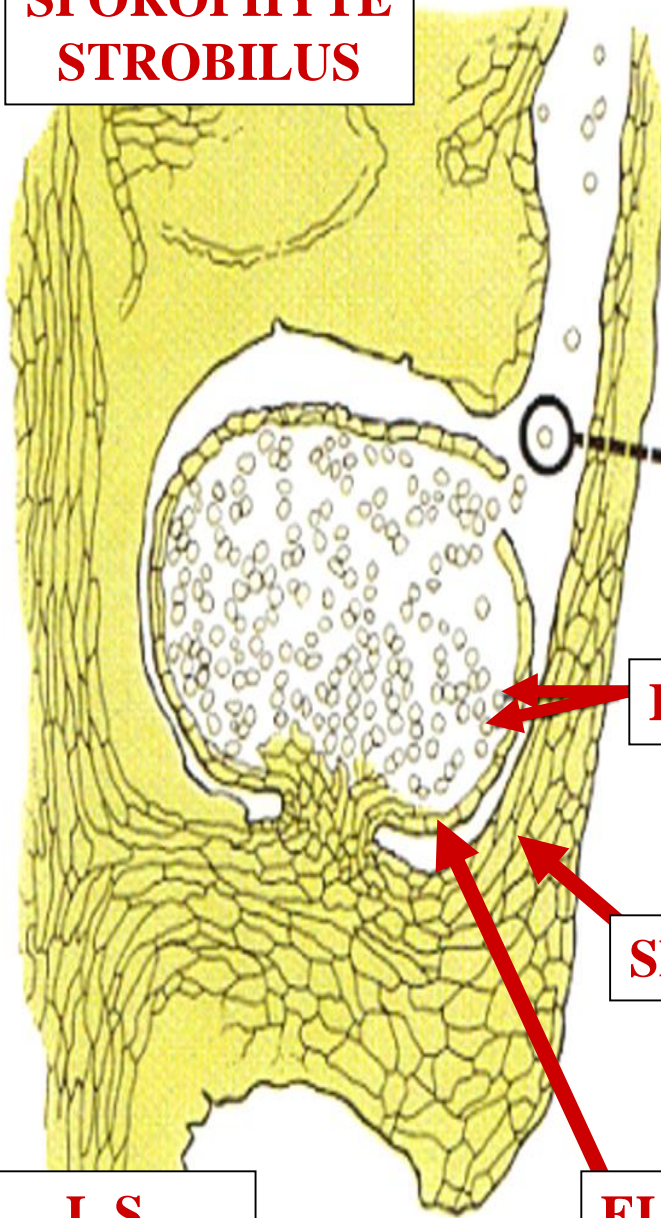
ISOSPORE

ISOSPORES

SPOROPHYLL

L.S.

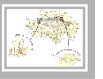
EUSPORANGIUM



**SPOROPHYTE
STROBILUS**

LYCOPODIUM

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MITOSIS

ISOSPORES

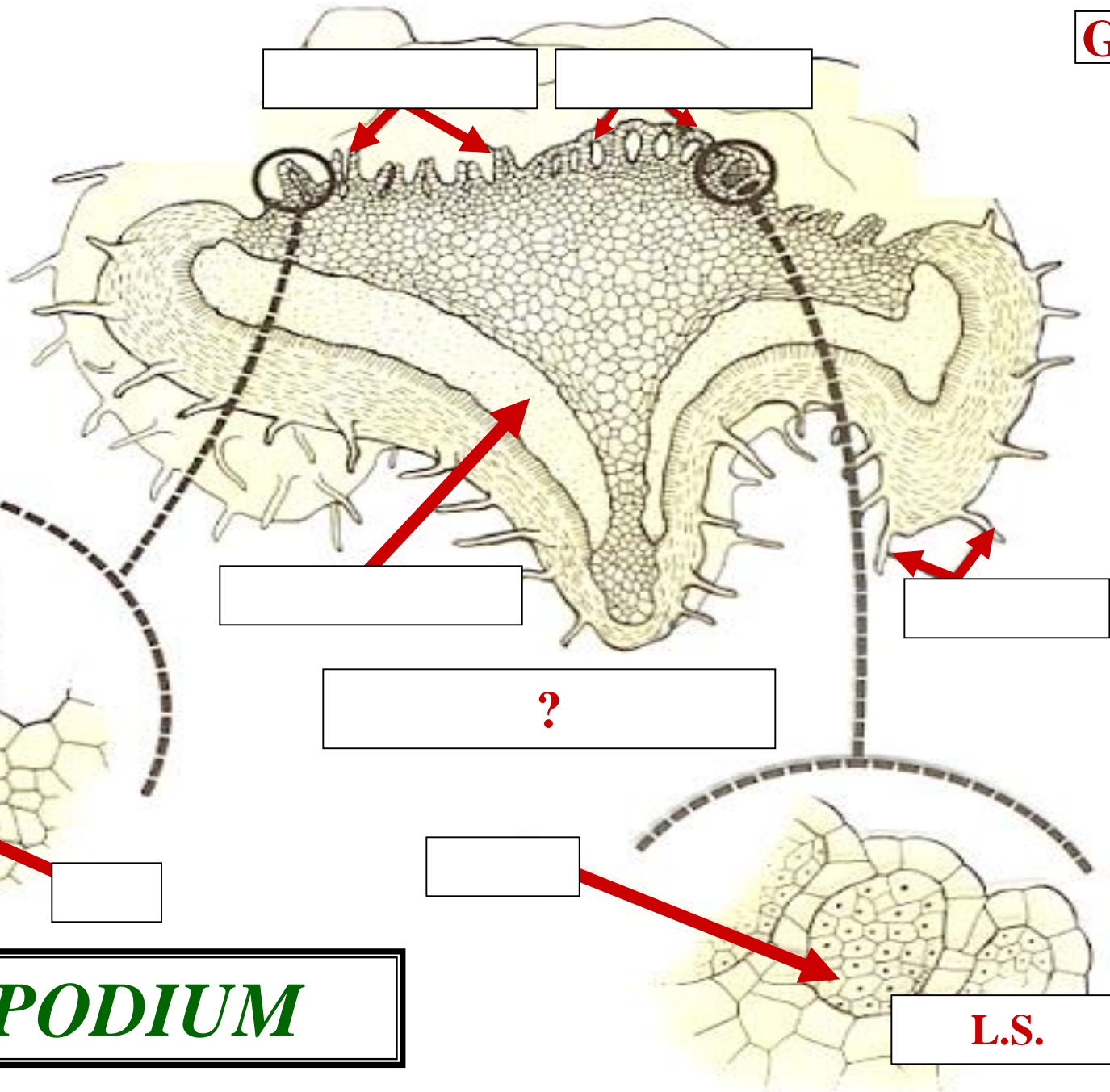
SPOROPHYLL

L.S.

EUSPORANGIUM

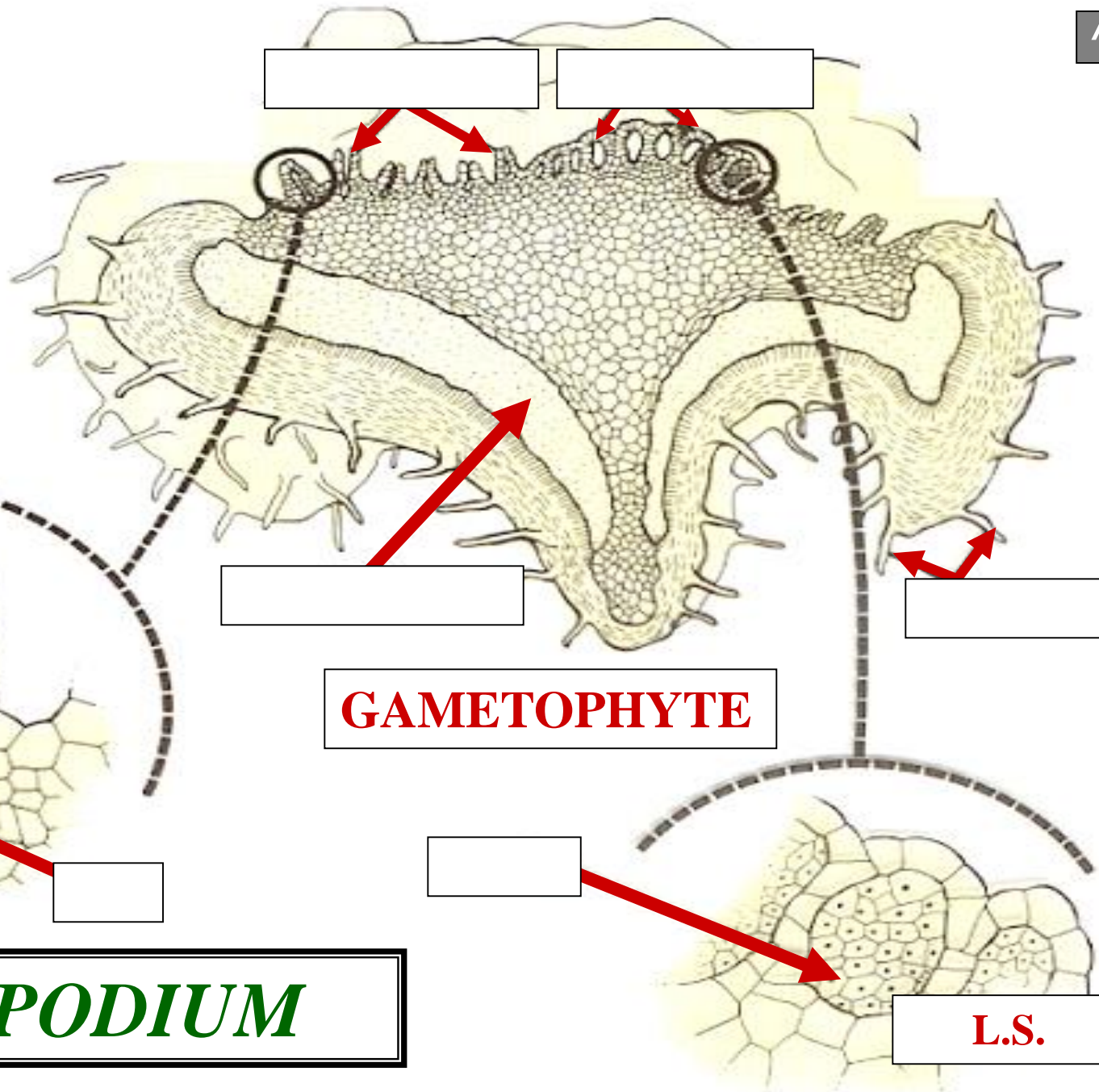


G



LYCOPODIUM

L.S.



GAMETOPHYTE

LYCOPODIUM

L.S.

EXOSPORIC GAMETOPHYTE

**EXOSPORIC
GAMETOPHYTE**



**EXOSPORIC
GAMETOPHYTE**

**GAMETOPHYTE
MATURE OUTSIDE
SPORE WALL**

**EXOSPORIC
GAMETOPHYTE**

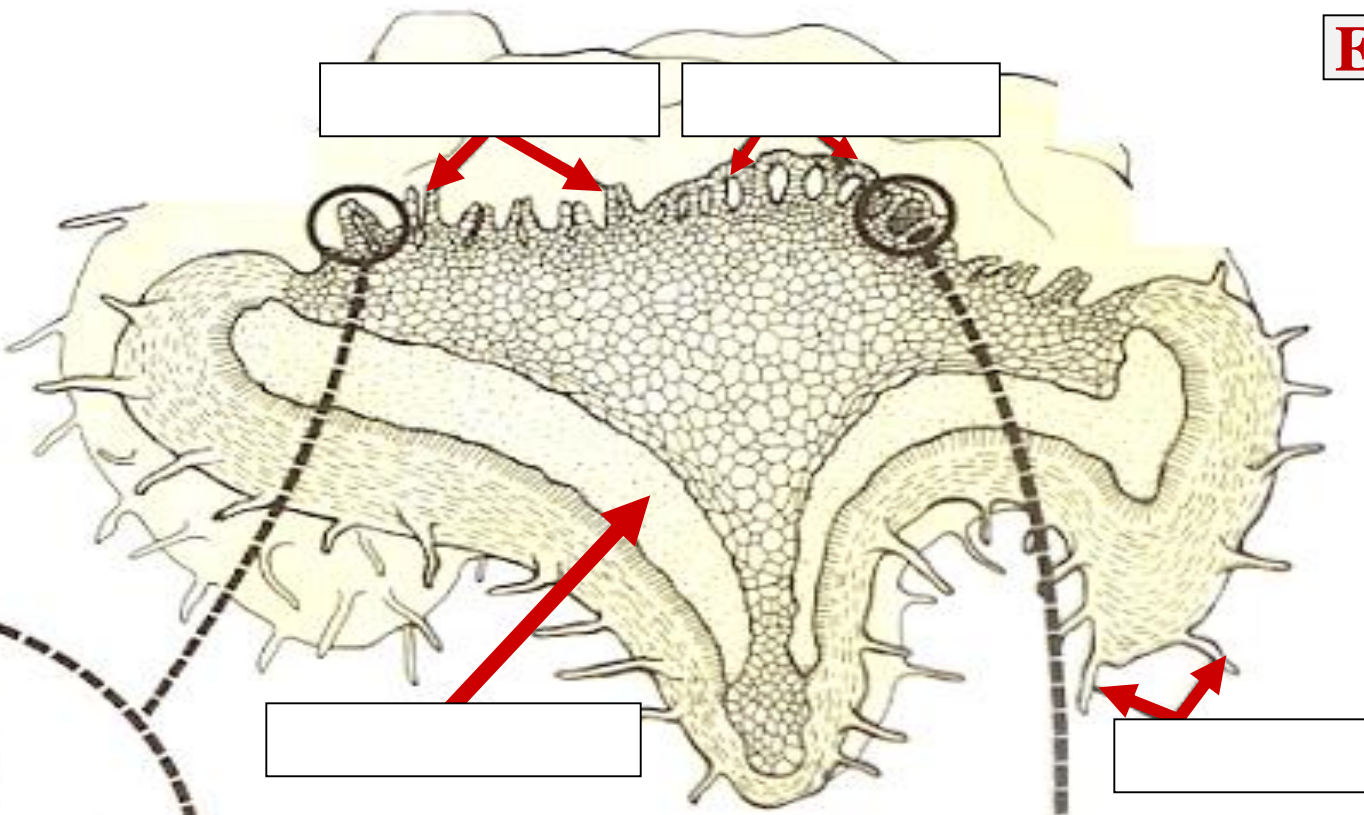
**EXOSPORIC
GAMETOPHYTE**



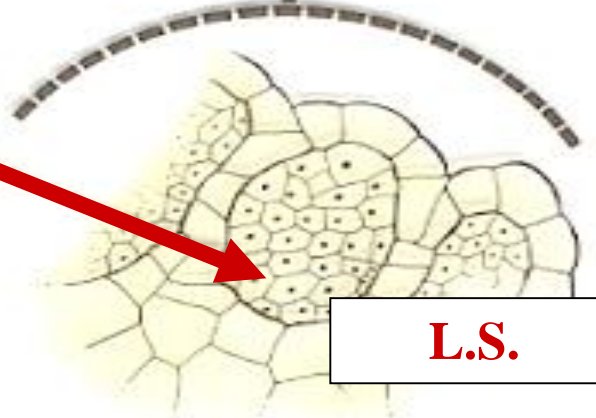
**GAMETOPHYTE
BISEXUAL**

**EXOSPORIC
GAMETOPHYTE**

E



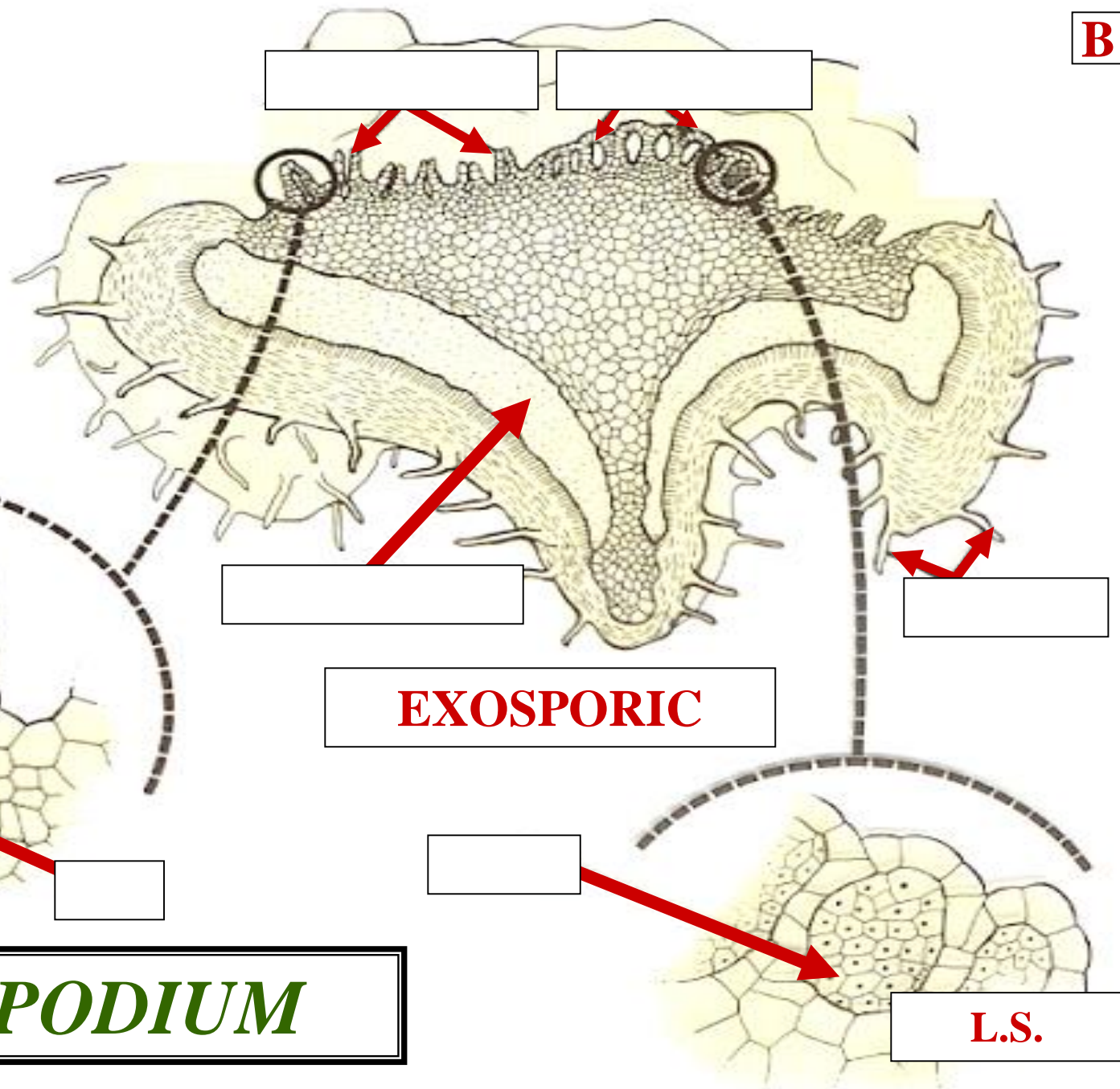
GAMETOPHYTE



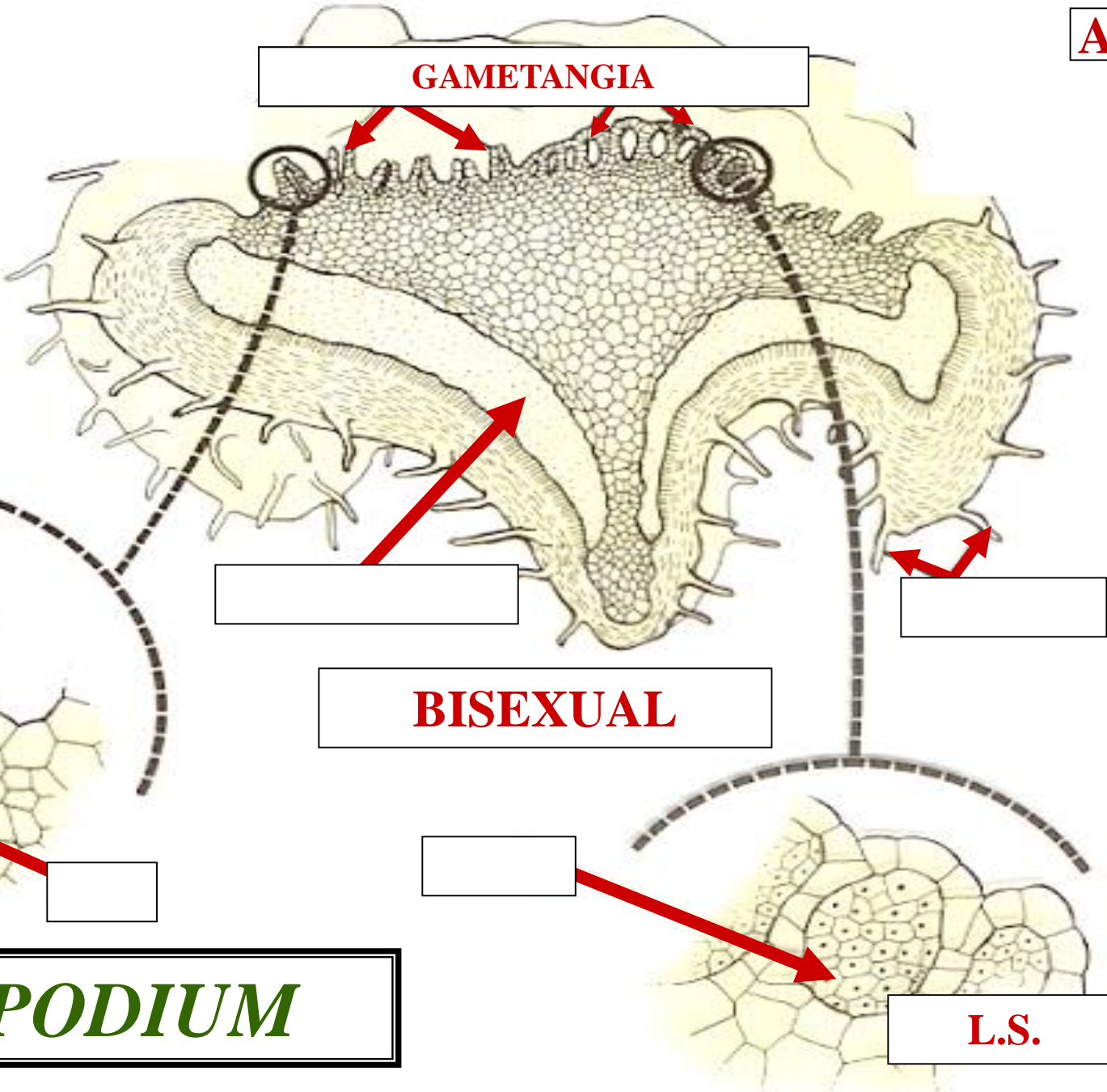
L.S.

LYCOPODIUM

B



A



GAMETANGIA

BISEXUAL

L.S.

LYCOPODIUM

A



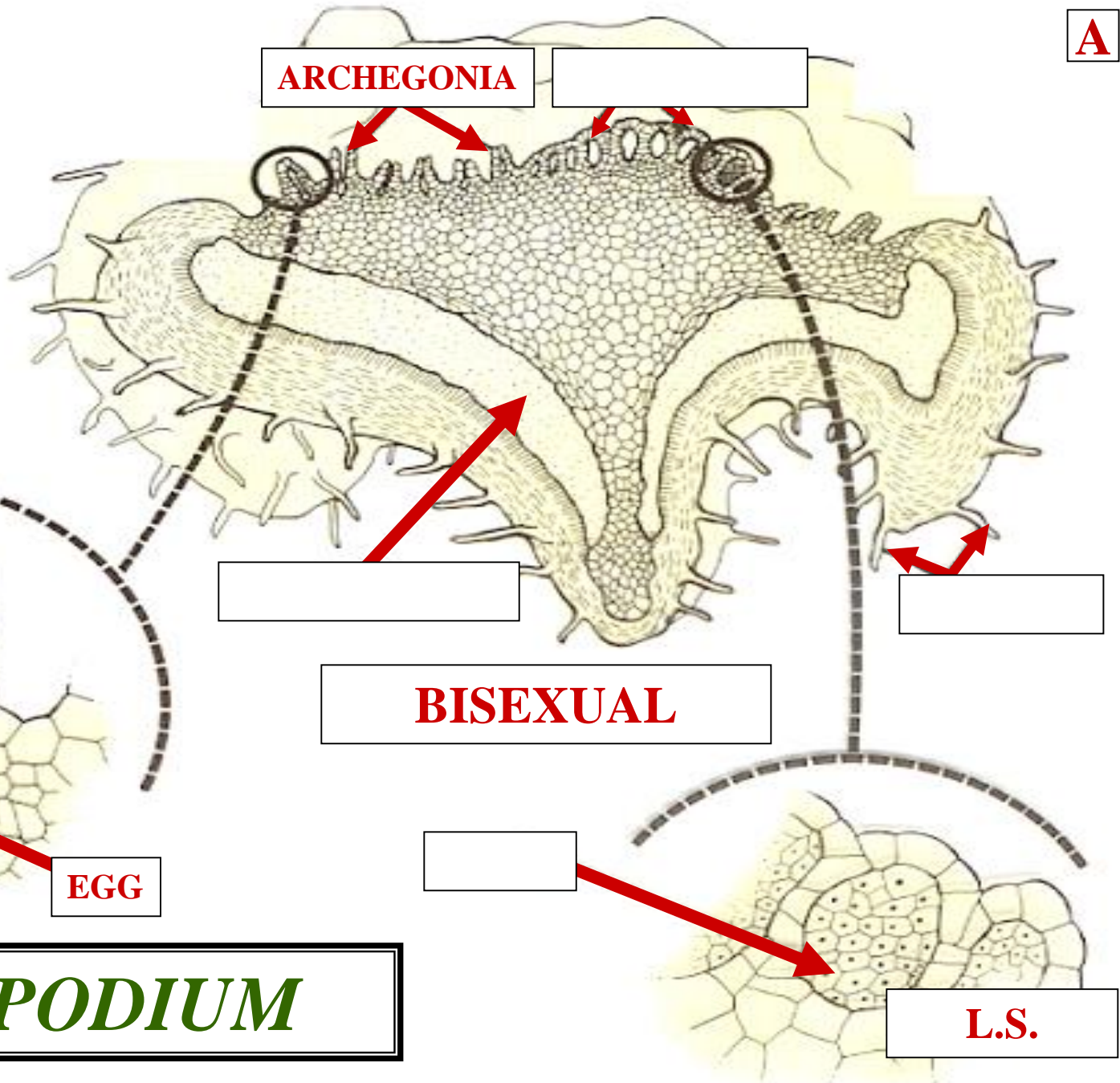
ARCHEGONIA

BISEXUAL

EGG

L.S.

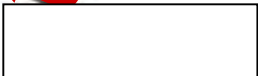
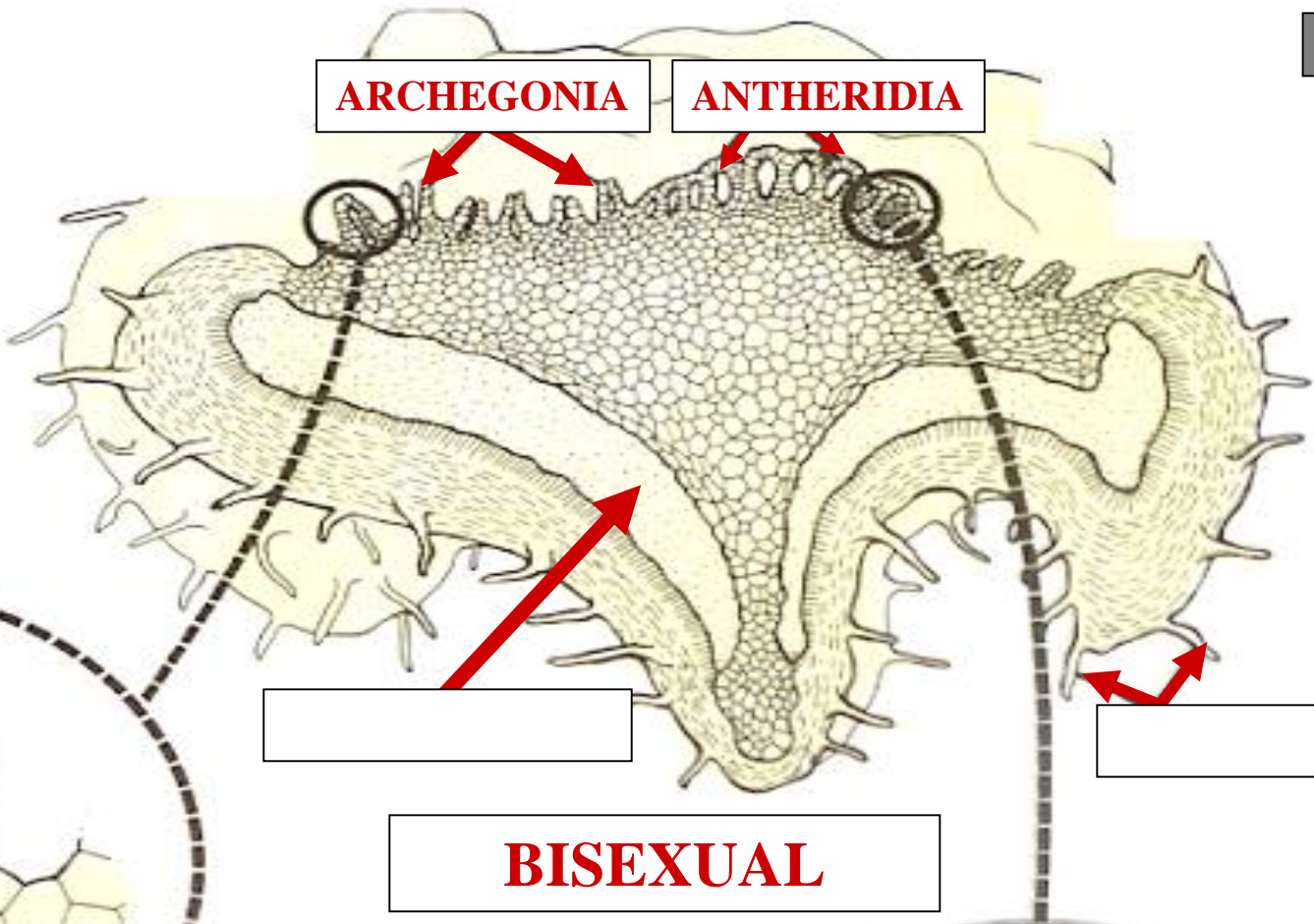
LYCOPODIUM



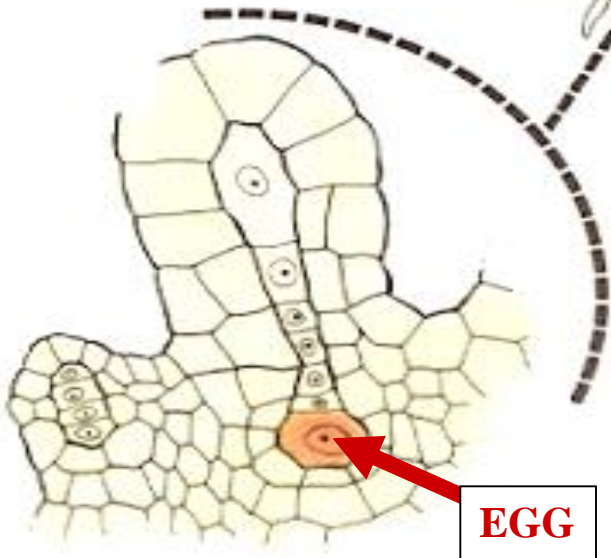


ARCHEGONIA

ANTHERIDIA



BISEXUAL



EGG

SPERM

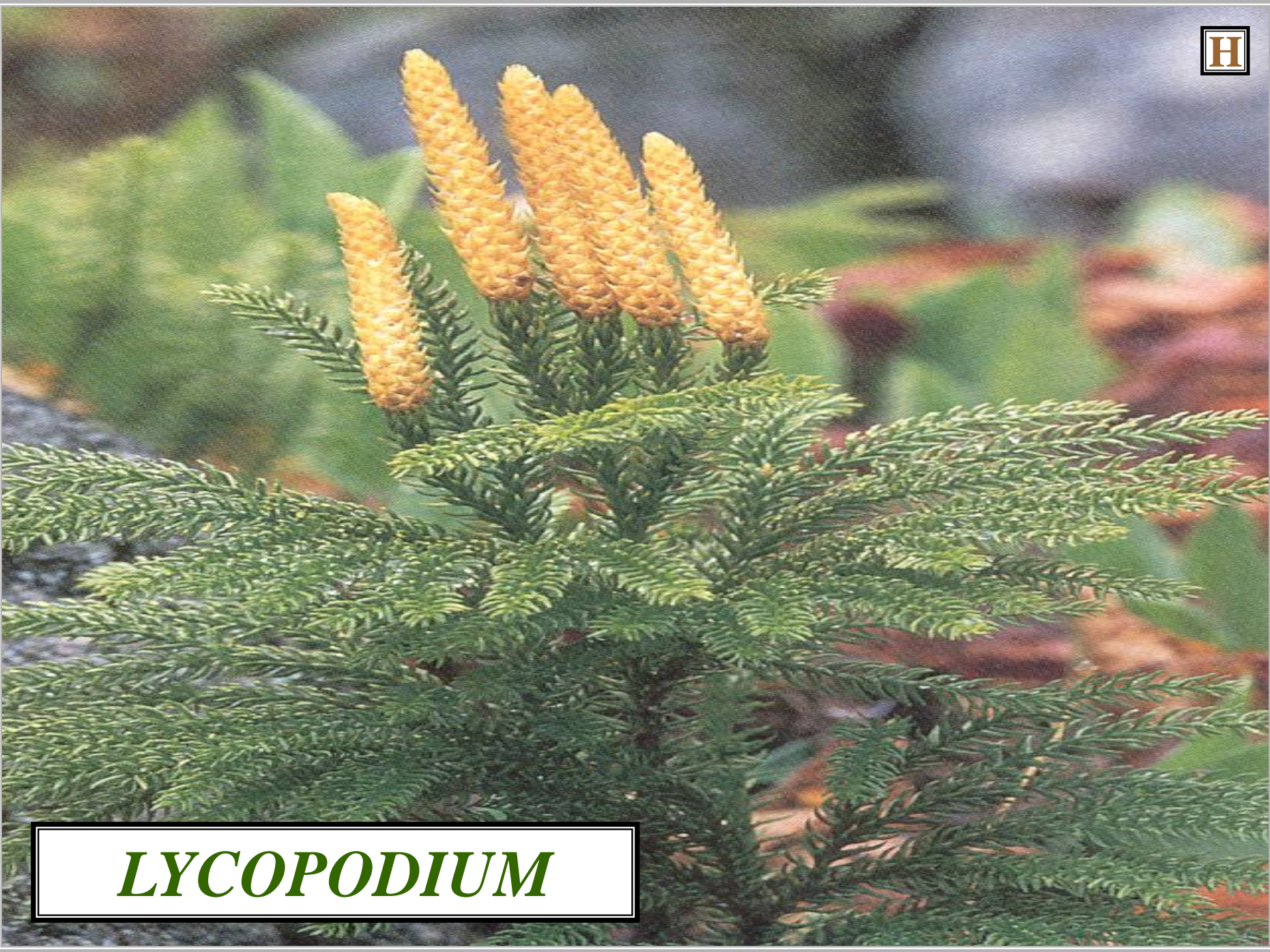


L.S.

LYCOPODIUM



HOMOSPOROUS SUMMARY



LYCOPODIUM

HOMOSPOROUS

LYCOPODIUM

ISOSPOROUS

LYCOPODIUM

**EXOSPORIC
GAMETOPHYTE**

LYCOPODIUM



**BISEXUAL
GAMETOPHYTE**

LYCOPODIUM

HETEROSPOROUS

HETEROSPOROUS



HETEROSPOROUS

2 SPORANGIA FORMS

HETEROSPOROUS

HETEROSPOROUS



2 SPORANGIA FORMS

2 SPORE FORMS

HETEROSPOROUS

S

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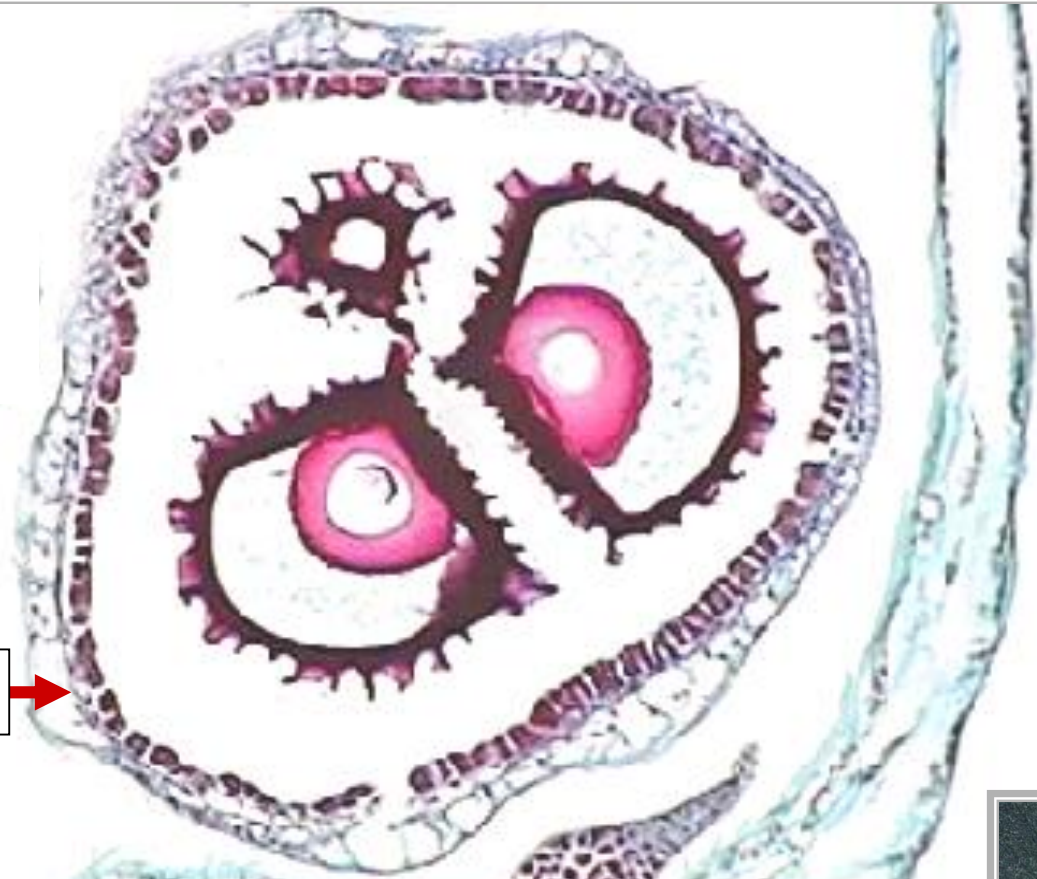


STROBILUS

SELAGINELLA



M



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STROBILUS

SELAGINELLA

L.S.

M



MEGASPORANGIUM →



STROBILUS

SELAGINELLA

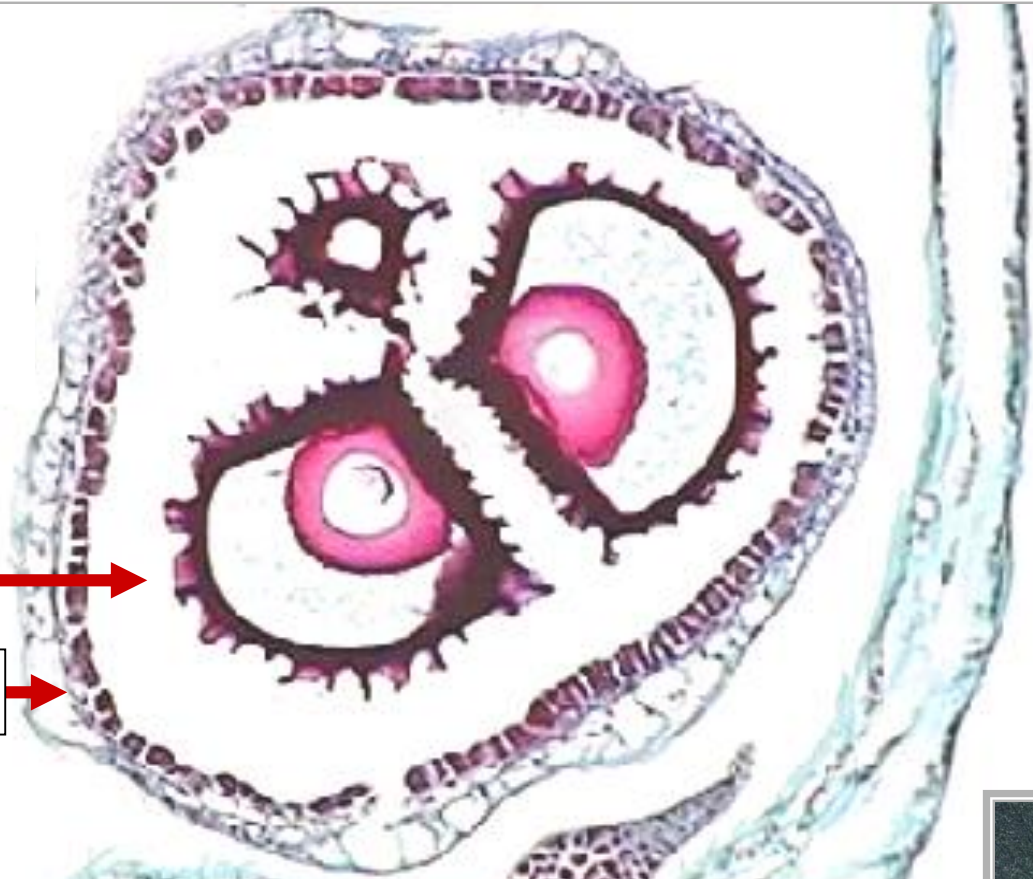
L.S.



MEGASPORES



MEGASPORANGIUM



STROBILUS

L.S.

SELAGINELLA

MEGASPORE

MEGASPORE

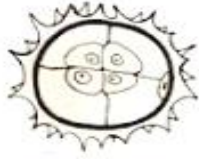
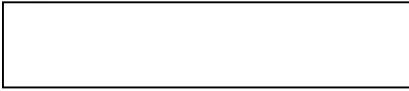


FEMALE SPORE

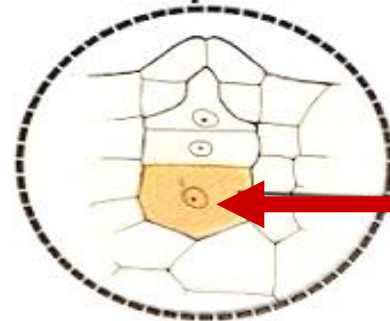
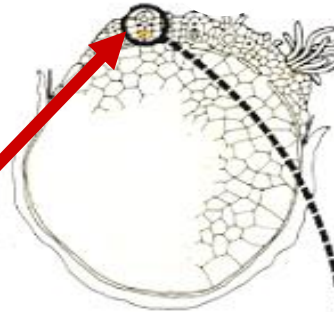
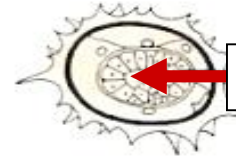
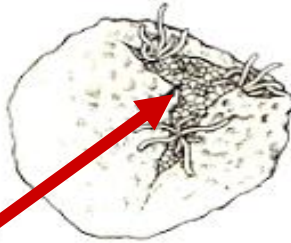
MEGASPORE

SELAGINELLA

M



MEGASPORE

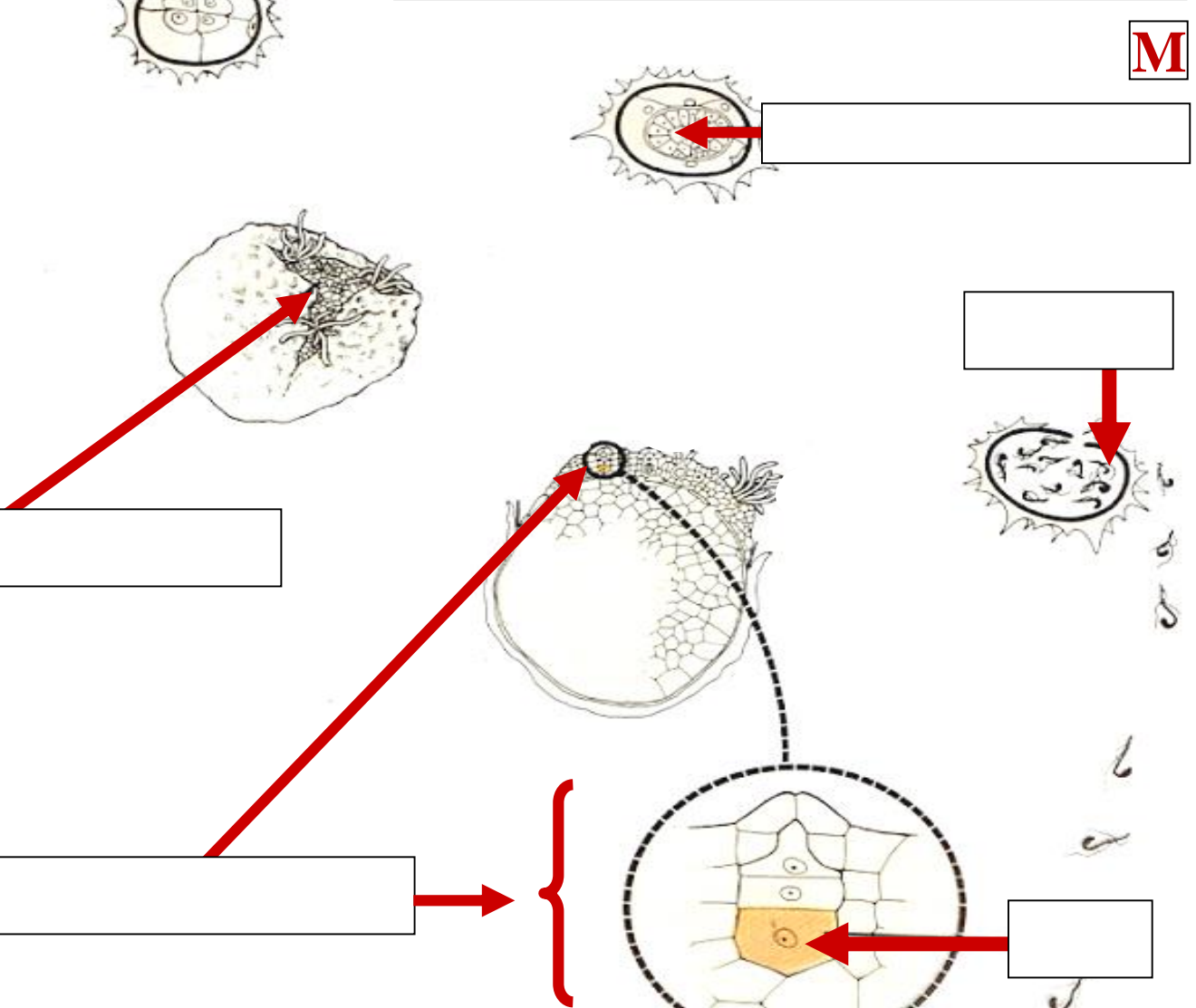
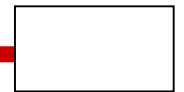
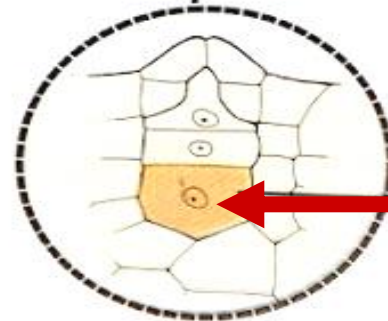
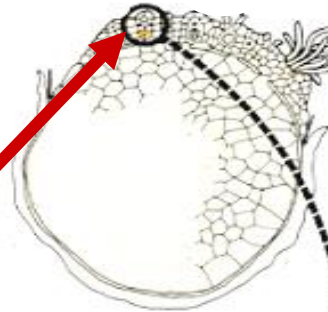
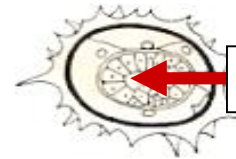
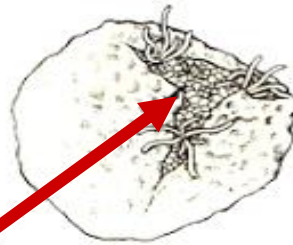


SELAGINELLA

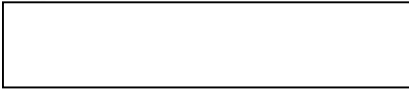
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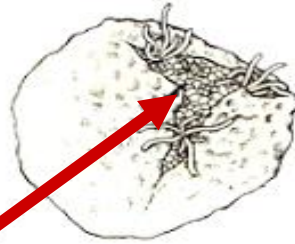
MITOSIS



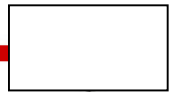
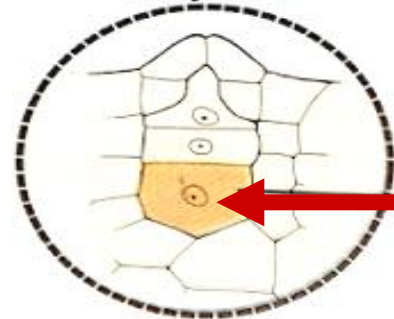
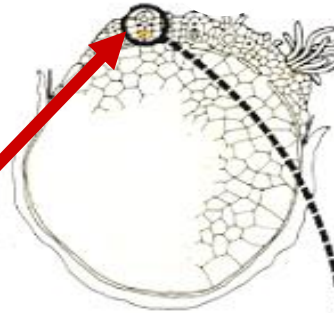
SELAGINELLA



MEGASPORE



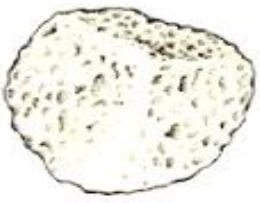
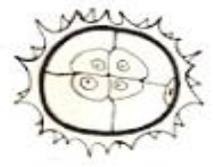
MEGAGAMETOPHYTE



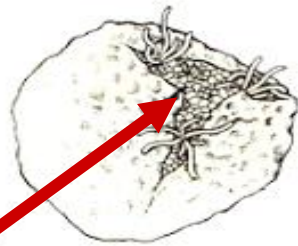
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SELAGINELLA

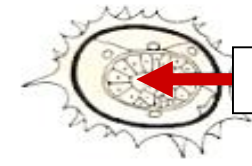
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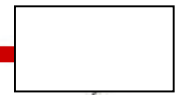
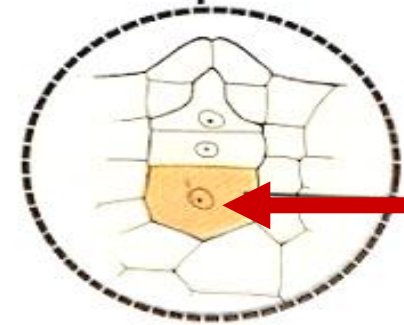
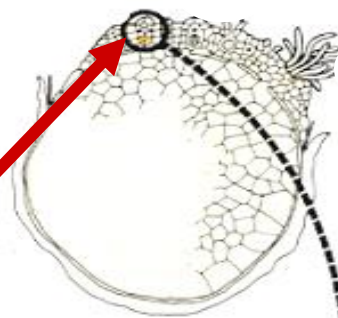
MEGASPORE



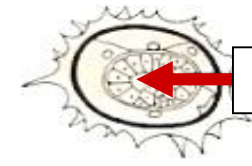
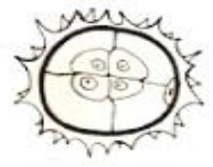
MEGAGAMETOPHYTE



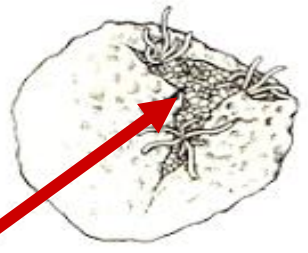
ARCHEGONIUM



SELAGINELLA



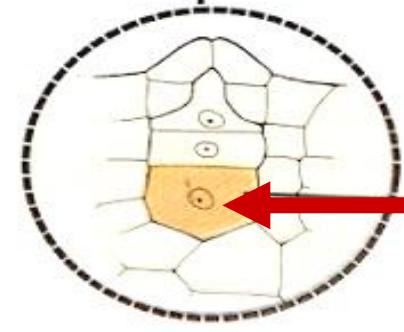
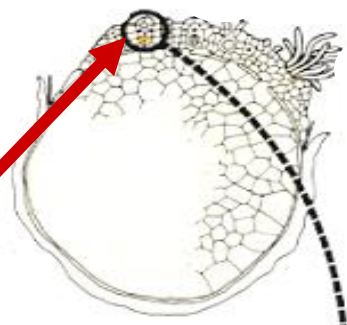
MEGASPORE



MEGAGAMETOPHYTE



ARCHEGONIUM



EGG



6
8



STROBILUS



SELAGINELLA

M



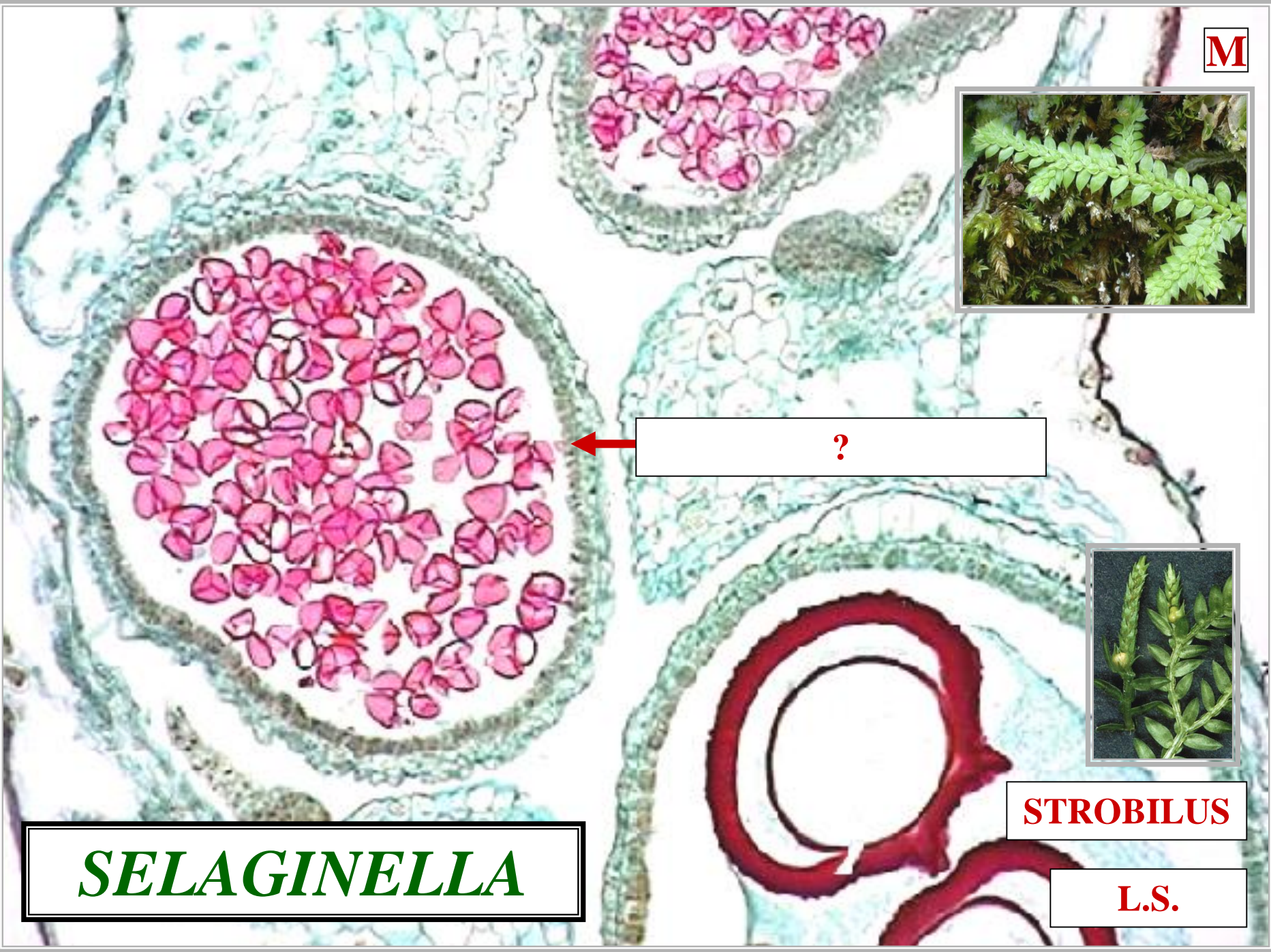
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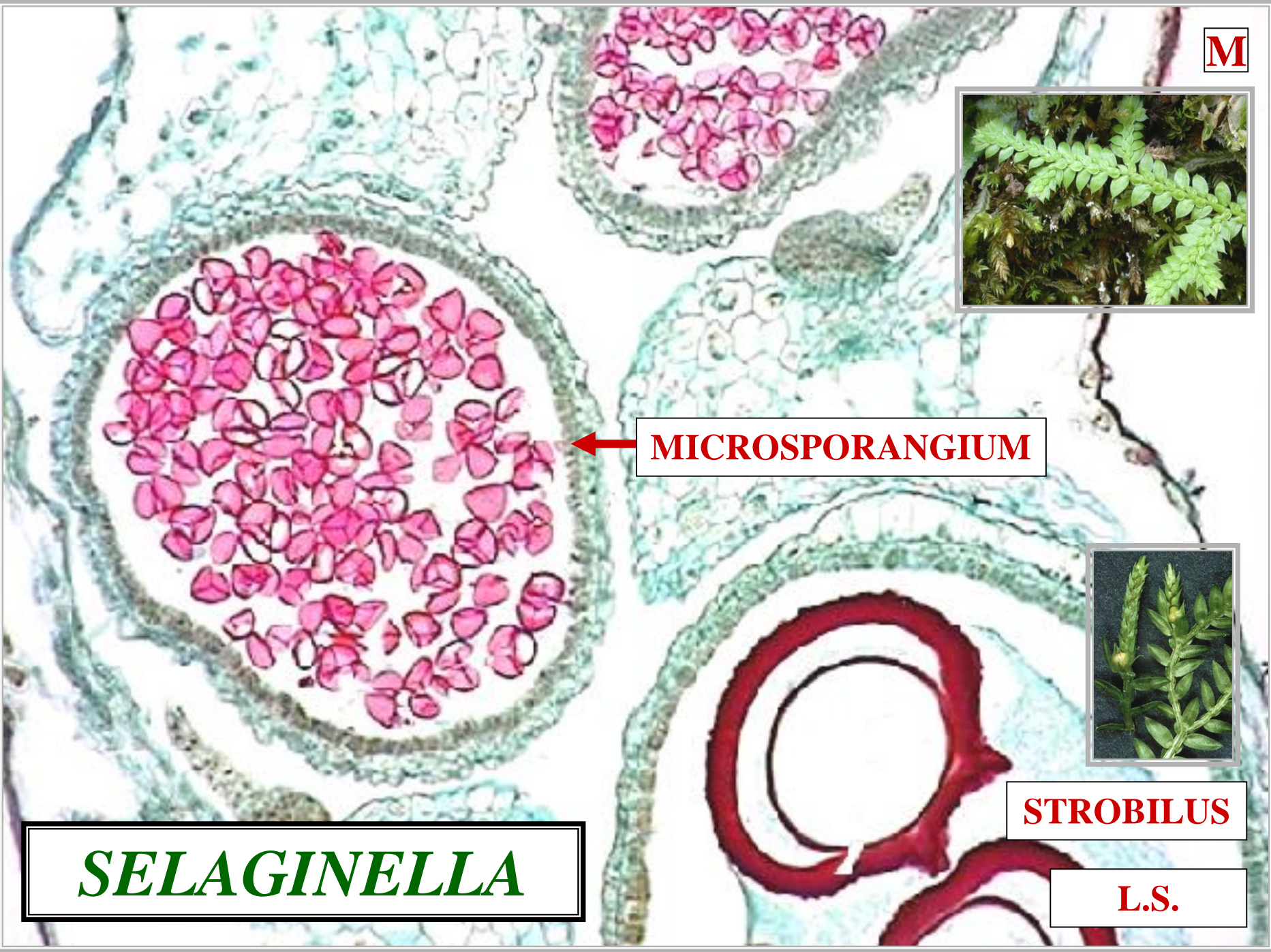
STROBILUS

L.S.

SELAGINELLA



M



MICROSPORANGIUM

STROBILUS

L.S.

SELAGINELLA

M



MICROSPORES

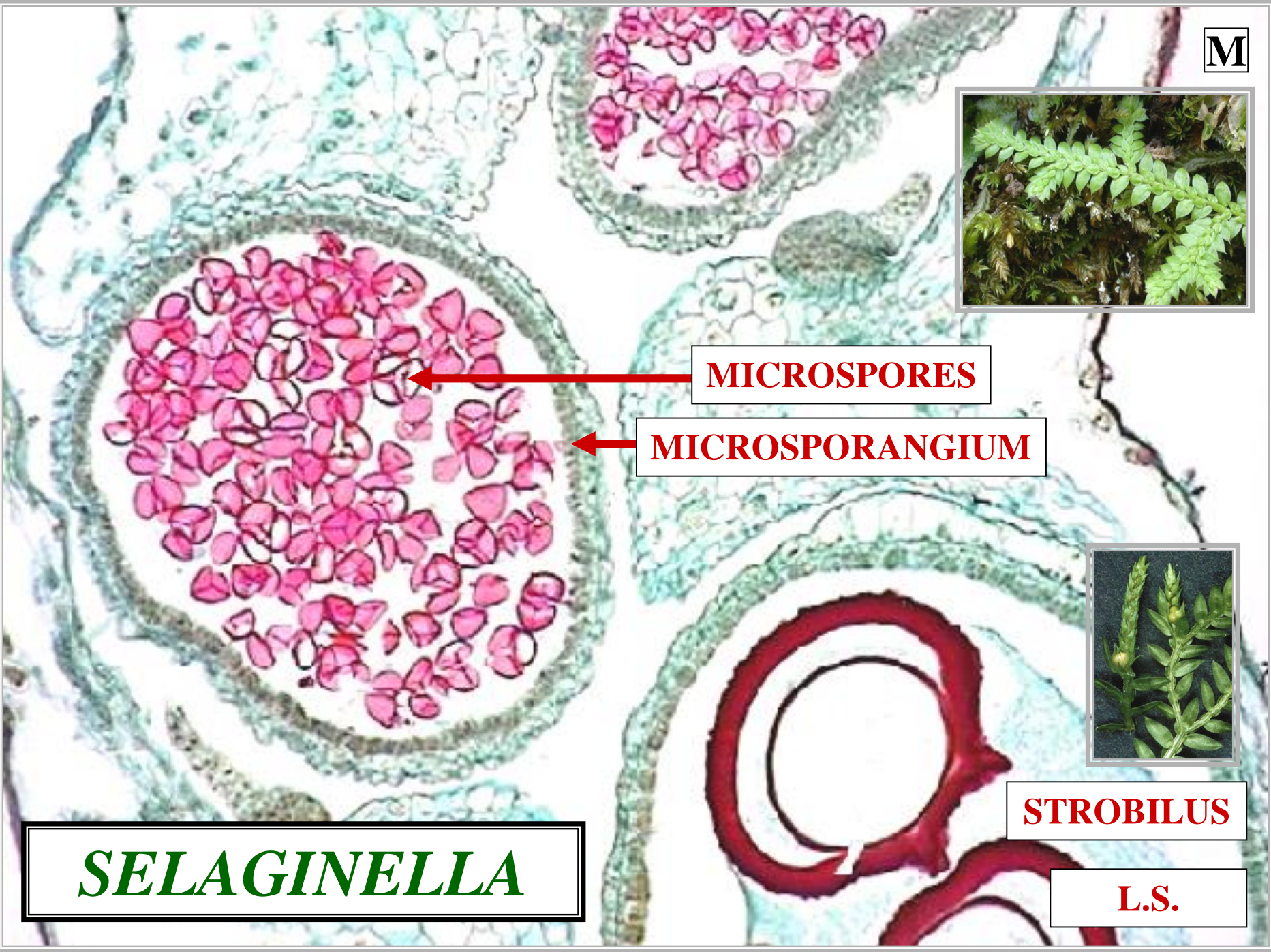
MICROSPORANGIUM



STROBILUS

L.S.

SELAGINELLA



MICROSPORE

MICROSPORE



MALE SPORE

MICROSPORE

SELAGINELLA



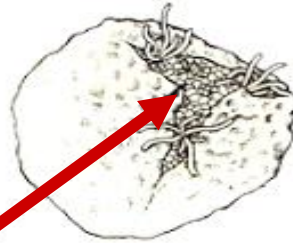
MICROSPORE



MICROGAMETOPHYTE



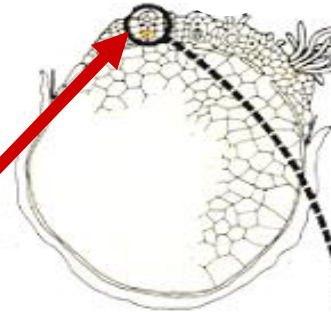
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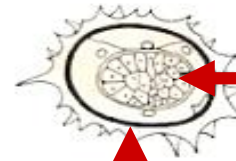
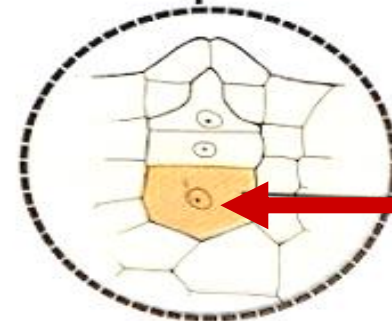
MEGAGAMETOPHYTE



ARCHEGONIUM



EGG



A



6

9

5

SELAGINELLA

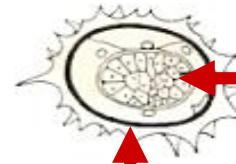
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MICROSPORE



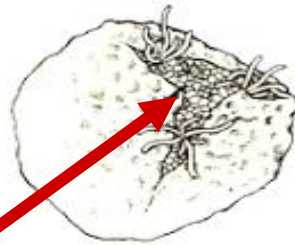
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ANTHERIDIUM



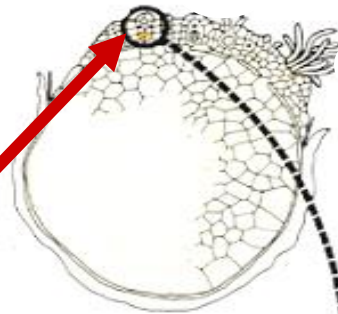
MEGASPORE



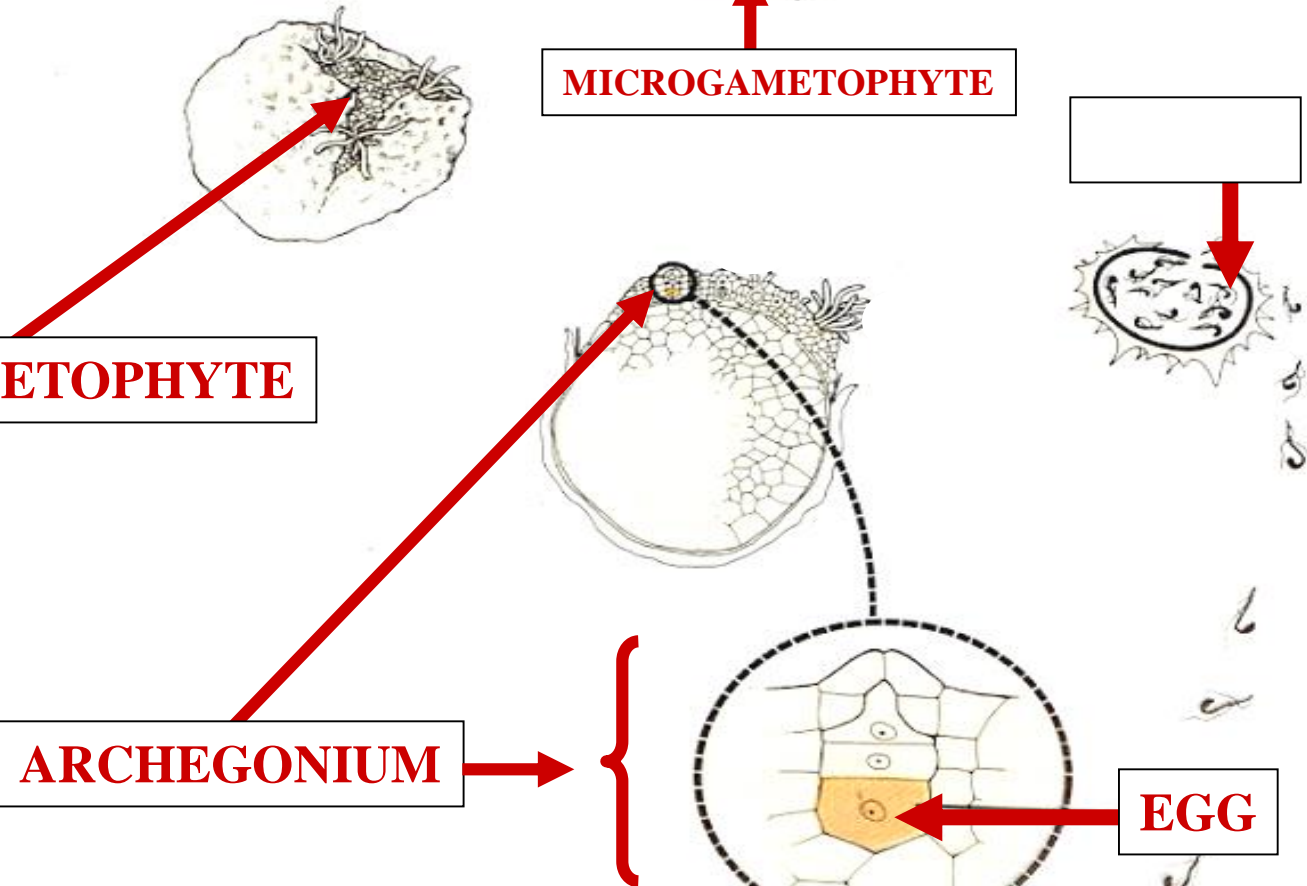
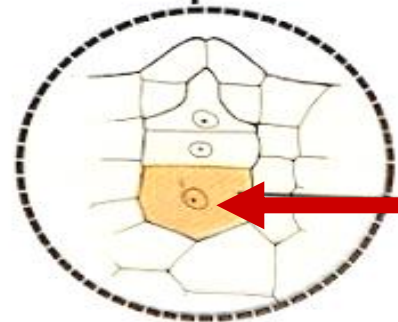
MEGAGAMETOPHYTE



ARCHEGONIUM



EGG



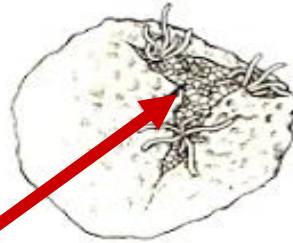
SELAGINELLA



MICROSPORE



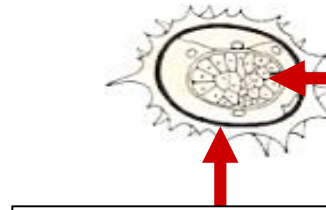
MEGASPORE



MEGAGAMETOPHYTE



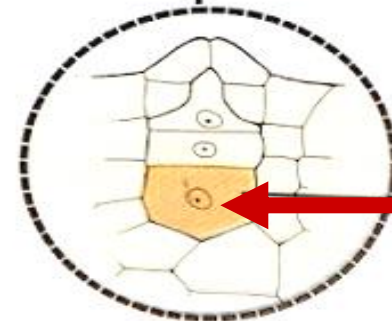
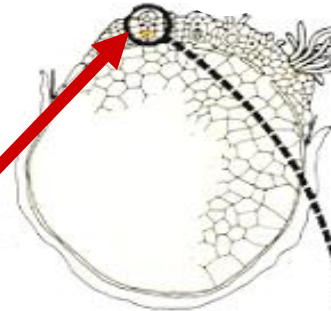
ARCHEGONIUM



ANTHERIDIUM

MICROGAMETOPHYTE

SPERM



EGG

ENDOSPORIC GAMETOPHYTE

**ENDOSPORIC
GAMETOPHYTE**



**ENDOSPORIC
GAMETOPHYTE**

**GAMETOPHYTE
MATURES INSIDE
SPORE WALL**

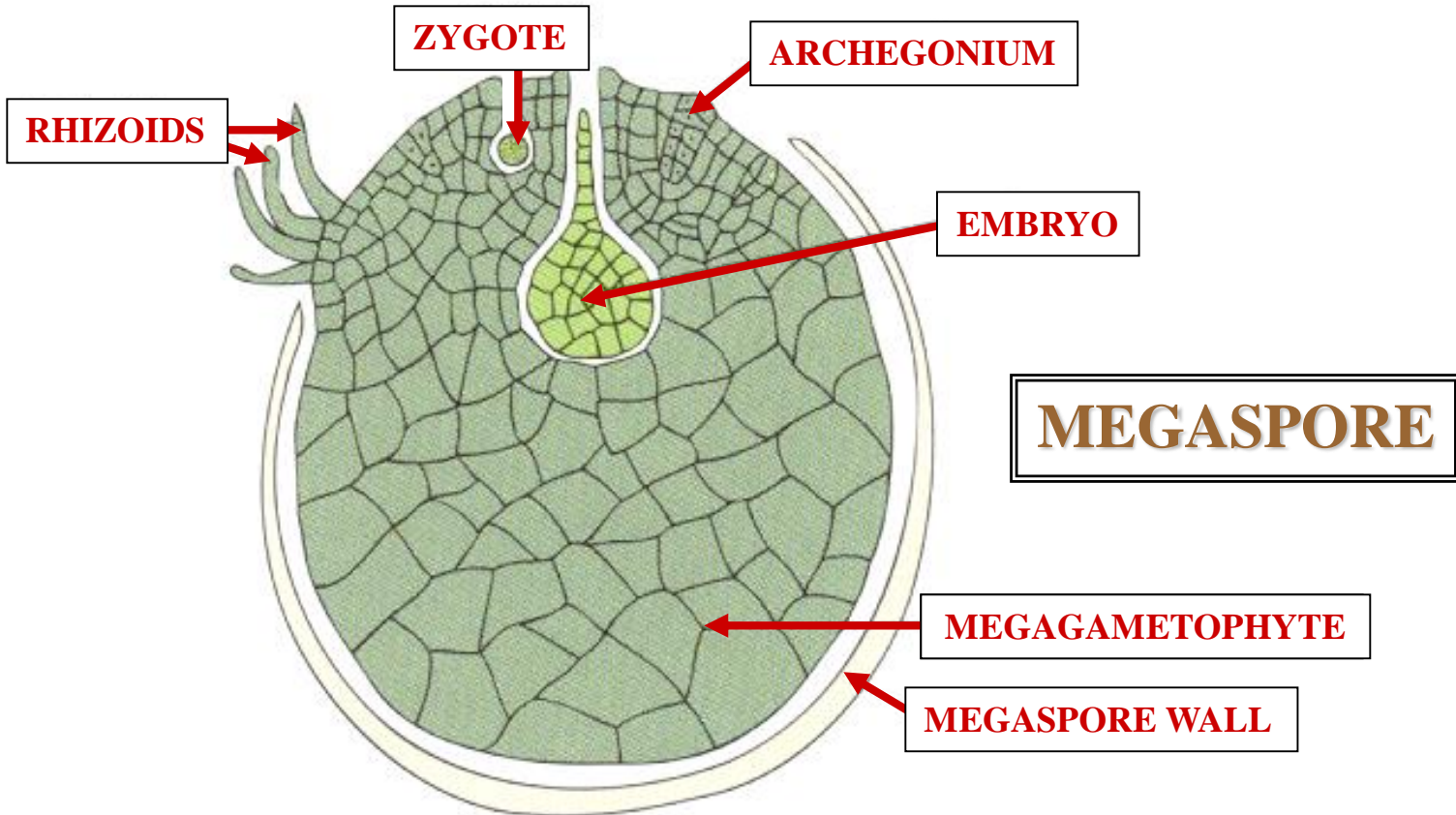
**ENDOSPORIC
GAMETOPHYTE**

**ENDOSPORIC
GAMETOPHYTE**

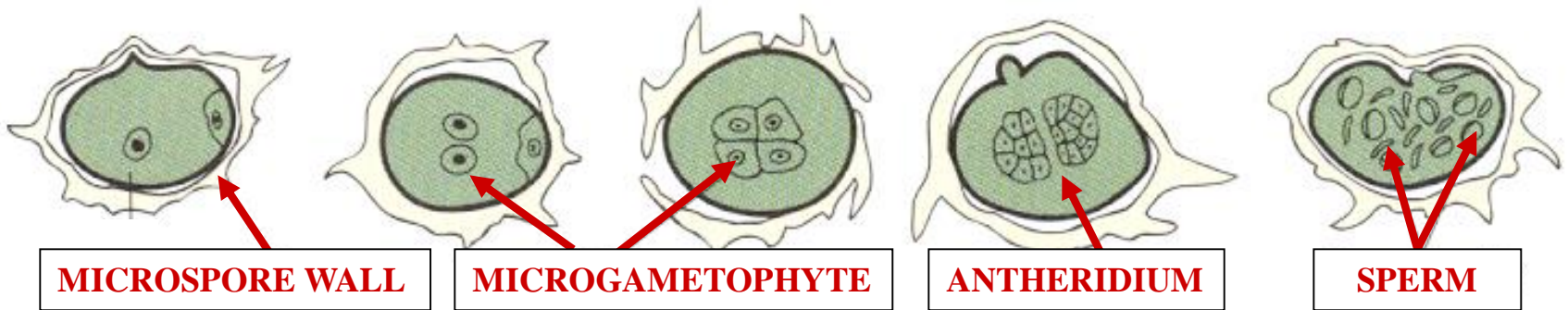


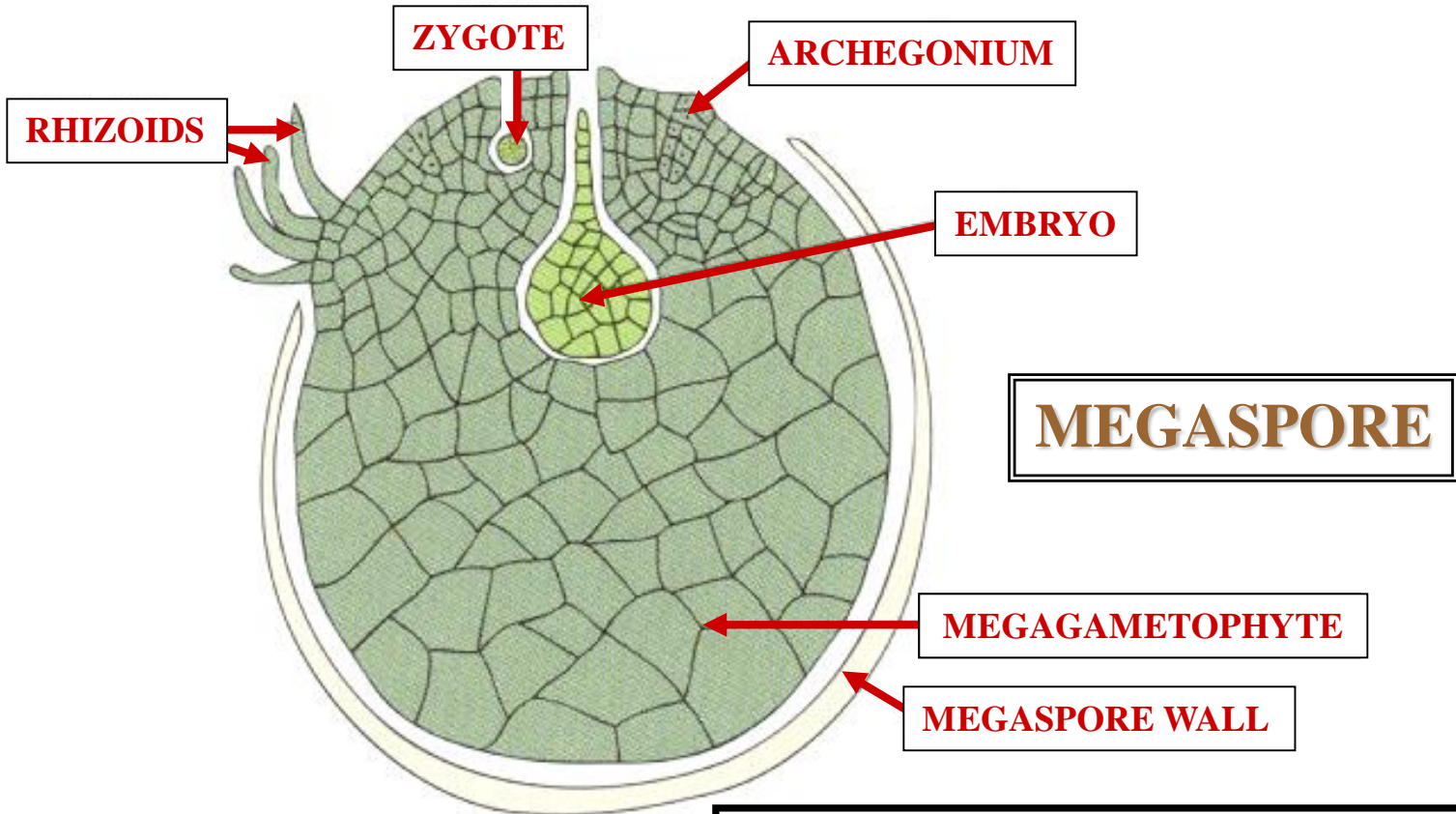
**GAMETOPHYTE
UNISEXUAL**

**ENDOSPORIC
GAMETOPHYTE**



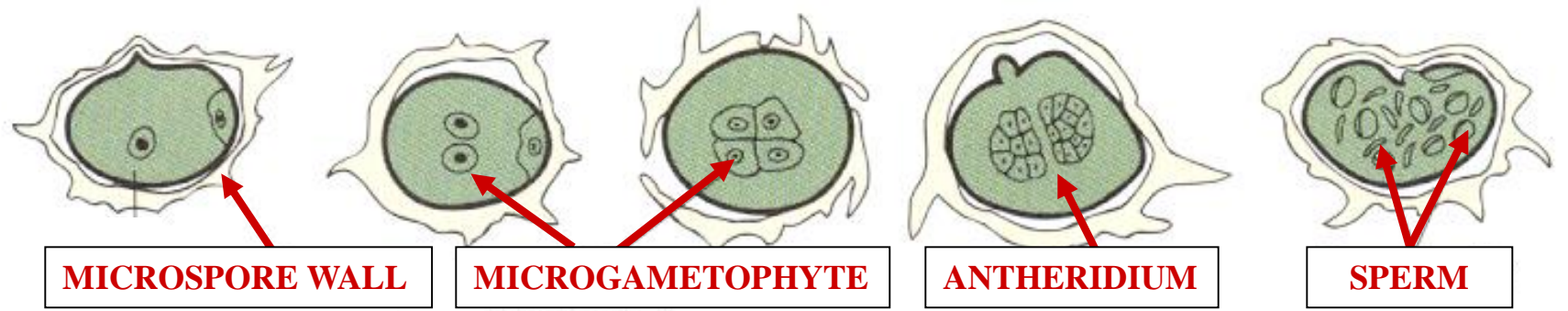
MICROSPORE

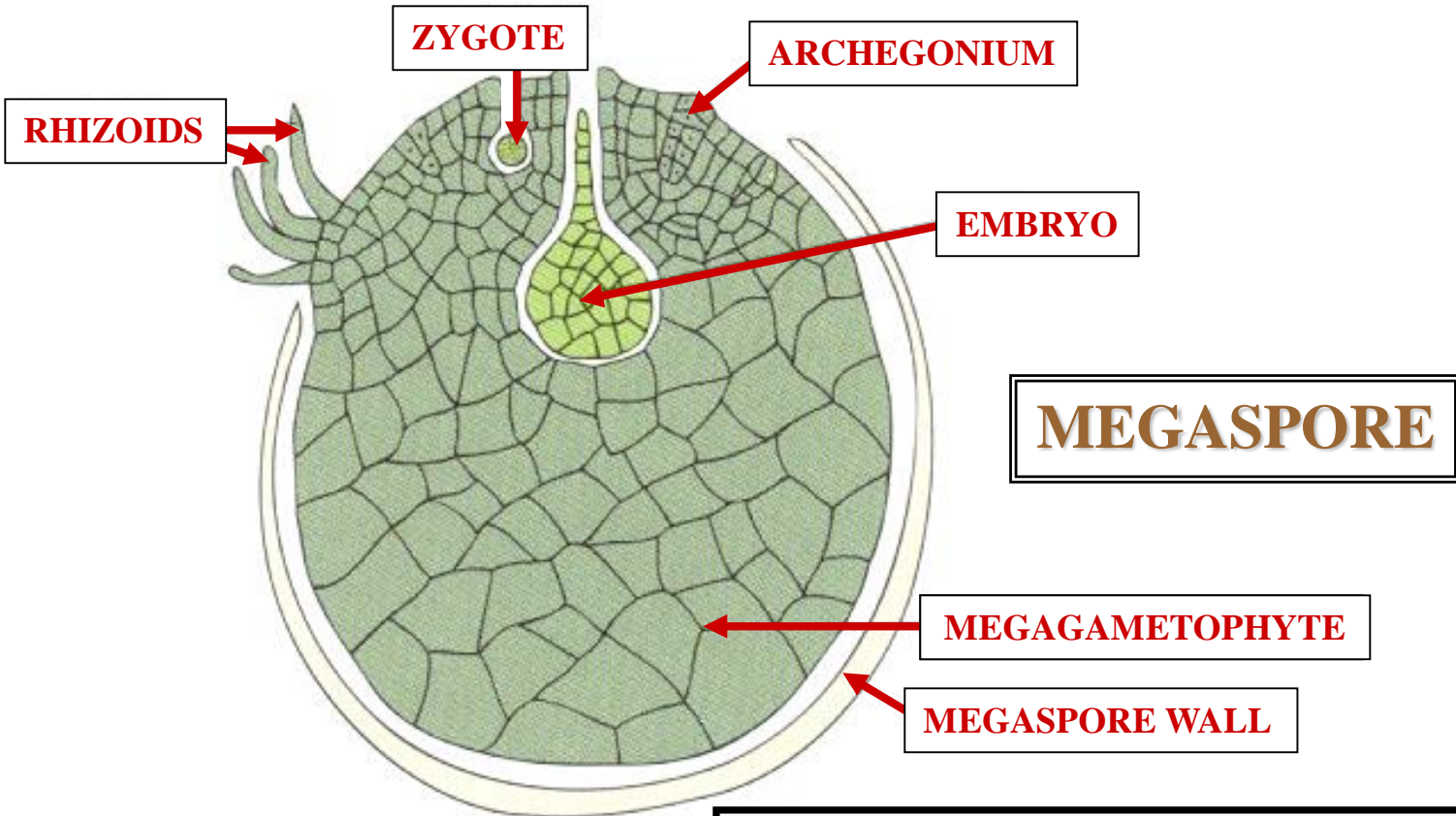




MICROSPORE

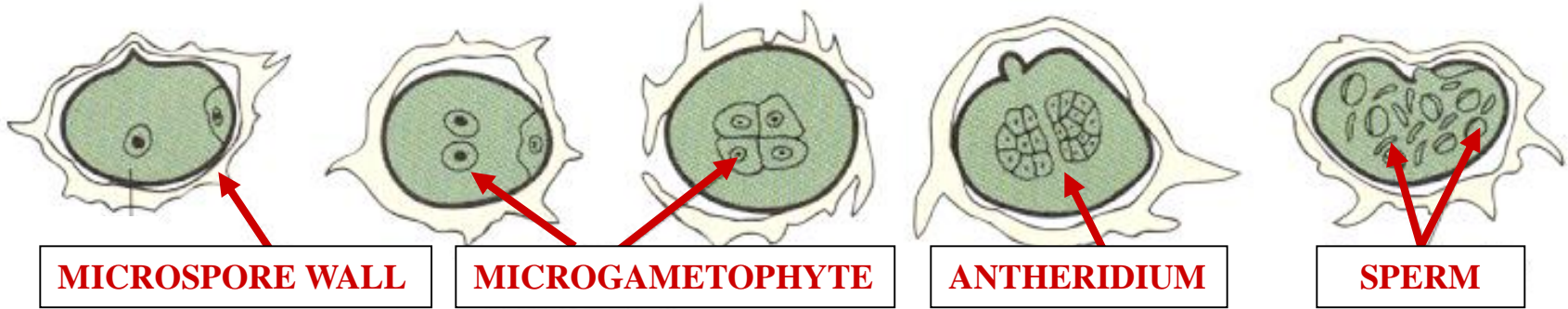
ENDOSPORIC





MICROSPORE

UNISEXUAL





HETEROSPOROUS SUMMARY



SELAGINELLA

M

M

HETEROSPOROUS

SELAGINELLA

MICROSPORES

MEGASPORES

SELAGINELLA



**ENDOSPORIC
GAMETOPHYTE**

SELAGINELLA

M

M

!

**UNISEXUAL
GAMETOPHYTE**

SELAGINELLA



MICROPHYLL

&

MEGAPHYLL

MISNOMERS

SIZE DOES NOT CORRELATE



MICROSPORE

&

MEGASPORE

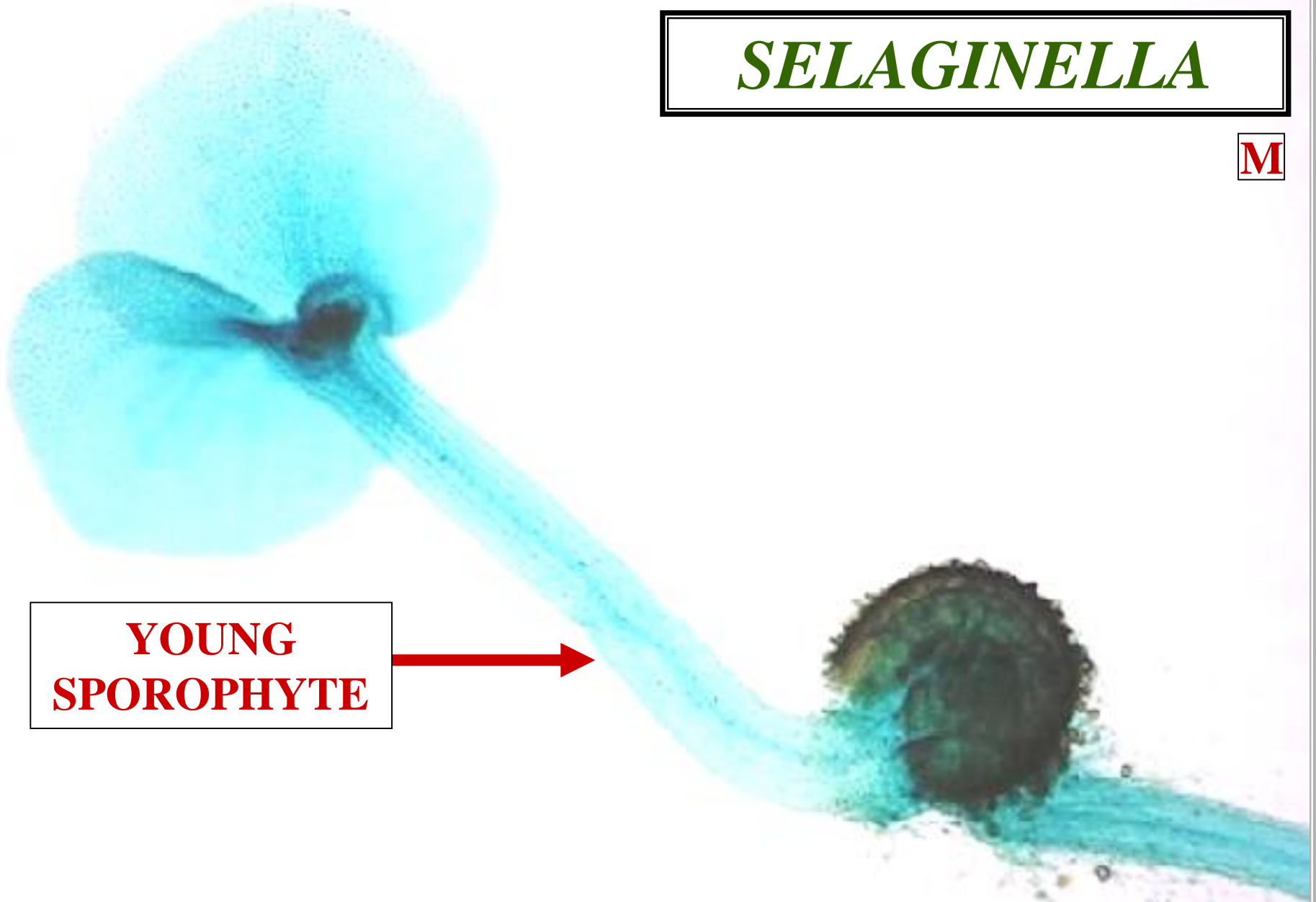
SIZE

CORRELATES

SELAGINELLA

M

**YOUNG
SPOROPHYTE**

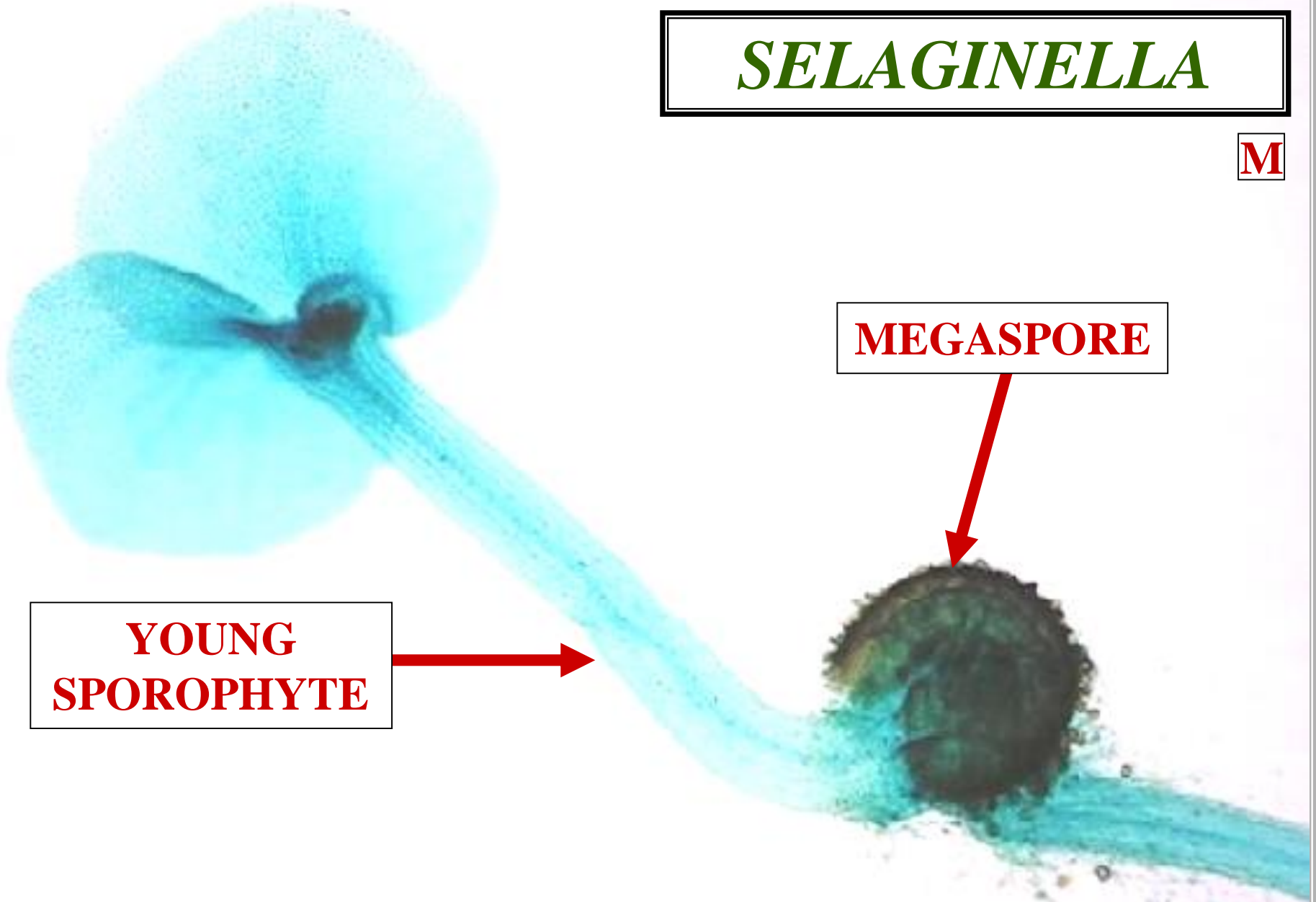


SELAGINELLA

M

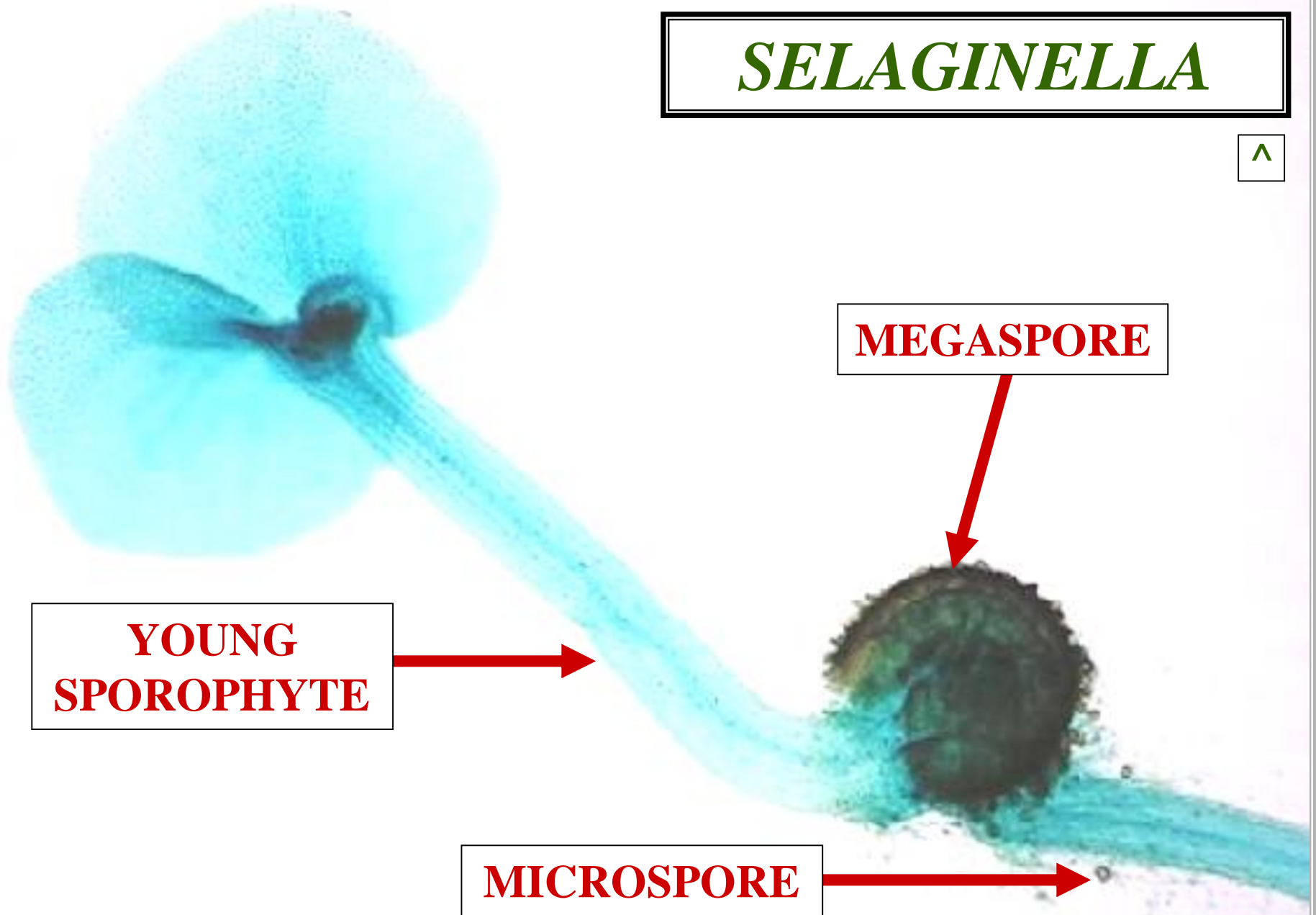
MEGASPORE

YOUNG
SPOROPHYTE



SELAGINELLA

^



MEGASPORE

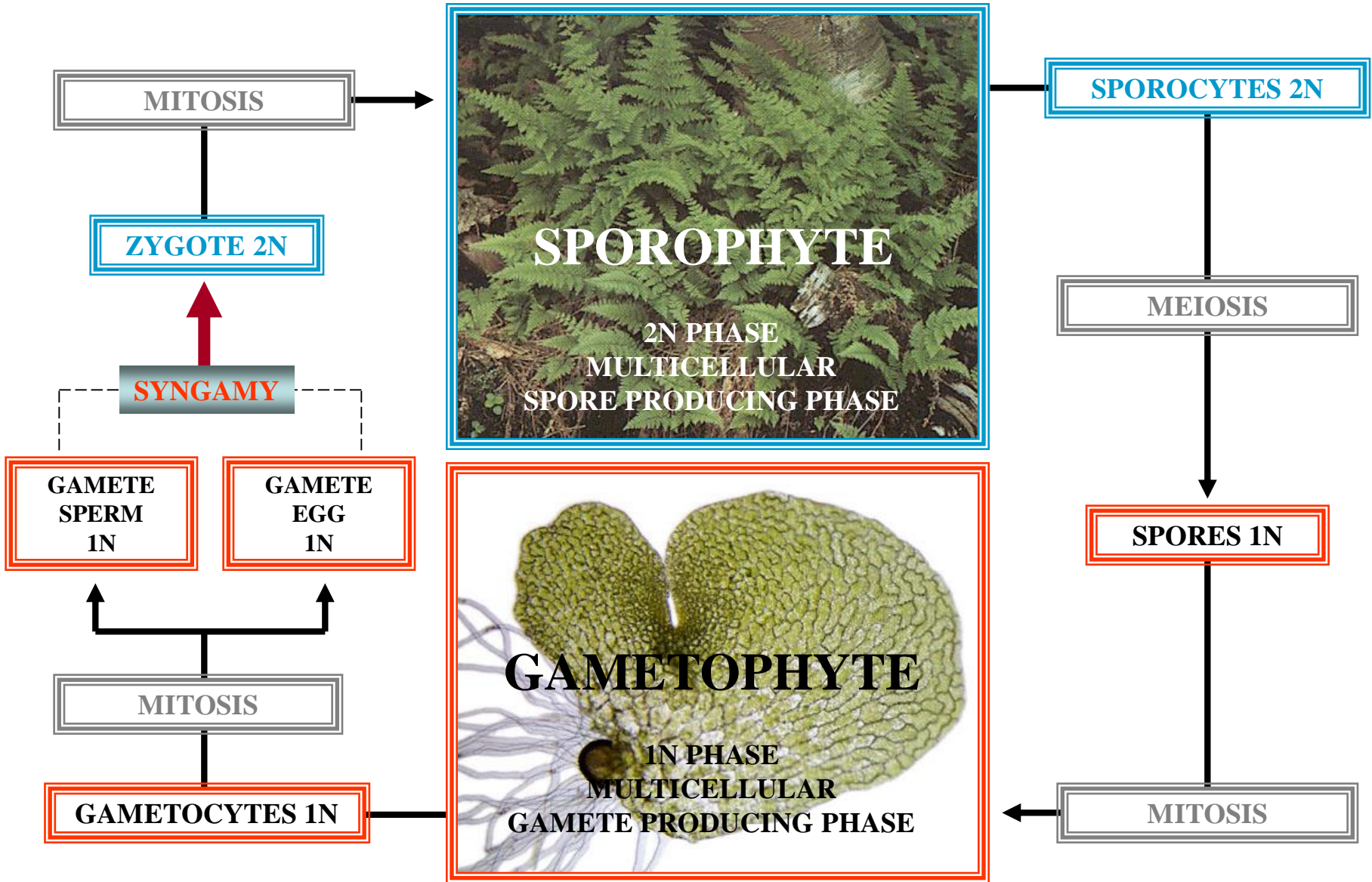
**YOUNG
SPOROPHYTE**

MICROSPORE

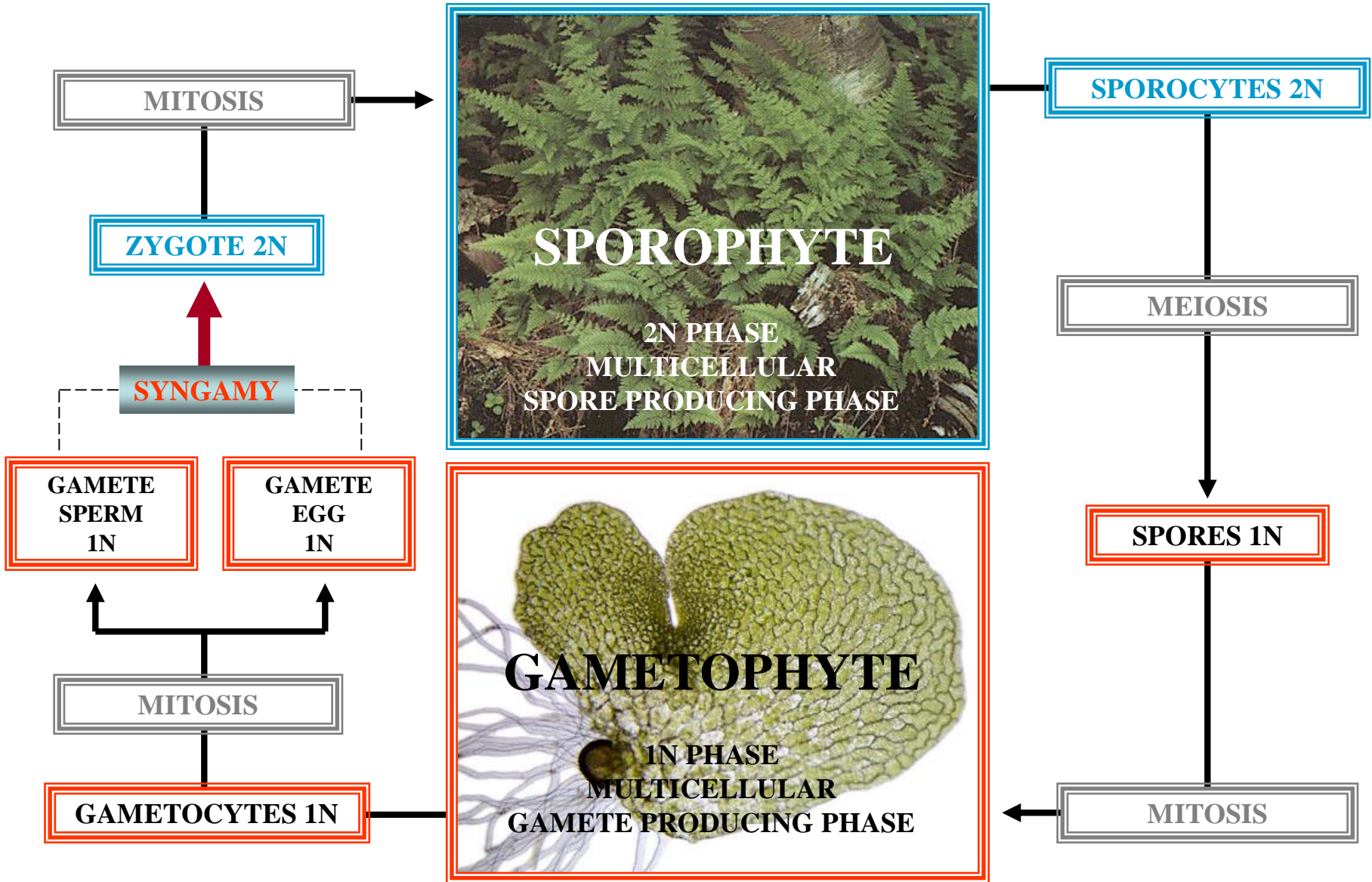


TRACHEOPHYTE REPRODUCTION

TRACHEOPHYTE LIFE CYCLE

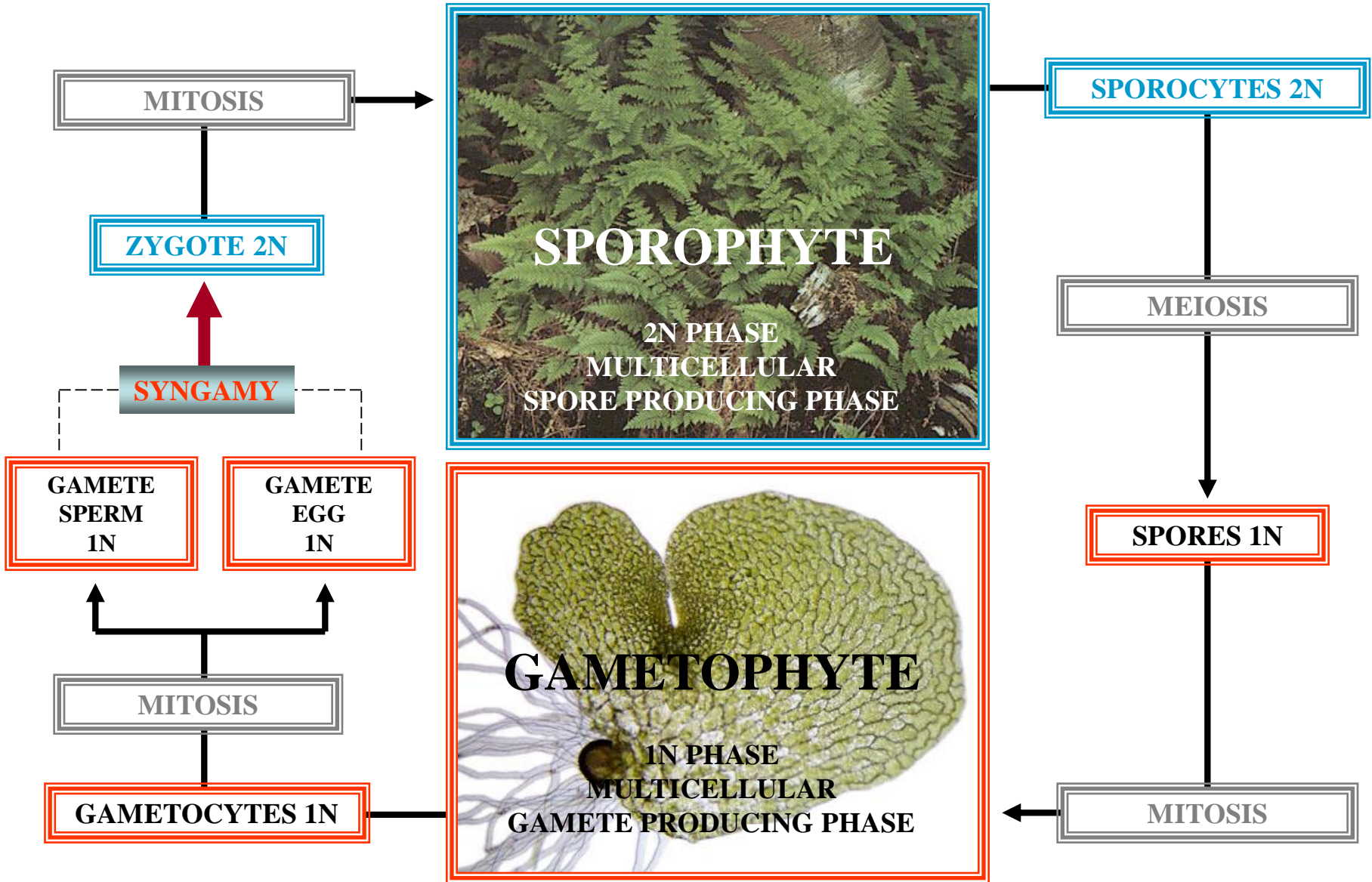


TRACHEOPHYTE SPORIC LIFE CYCLE





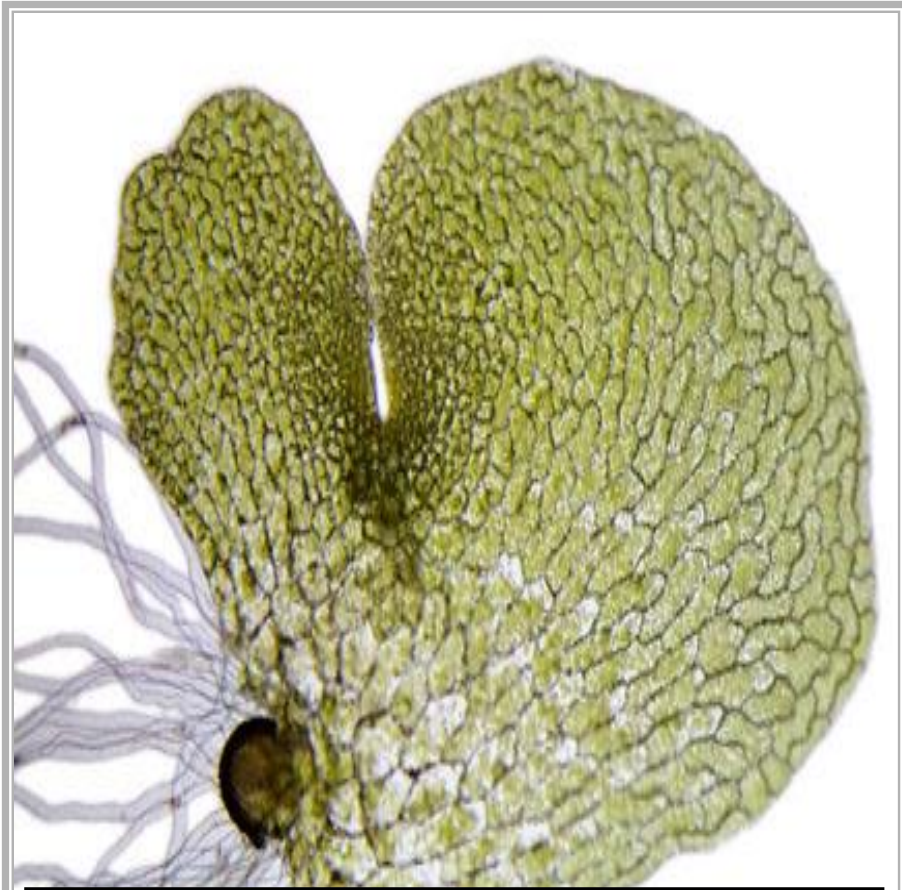
TRACHEOPHYTE HETEROMORPHIC SPORIC LIFE CYCLE



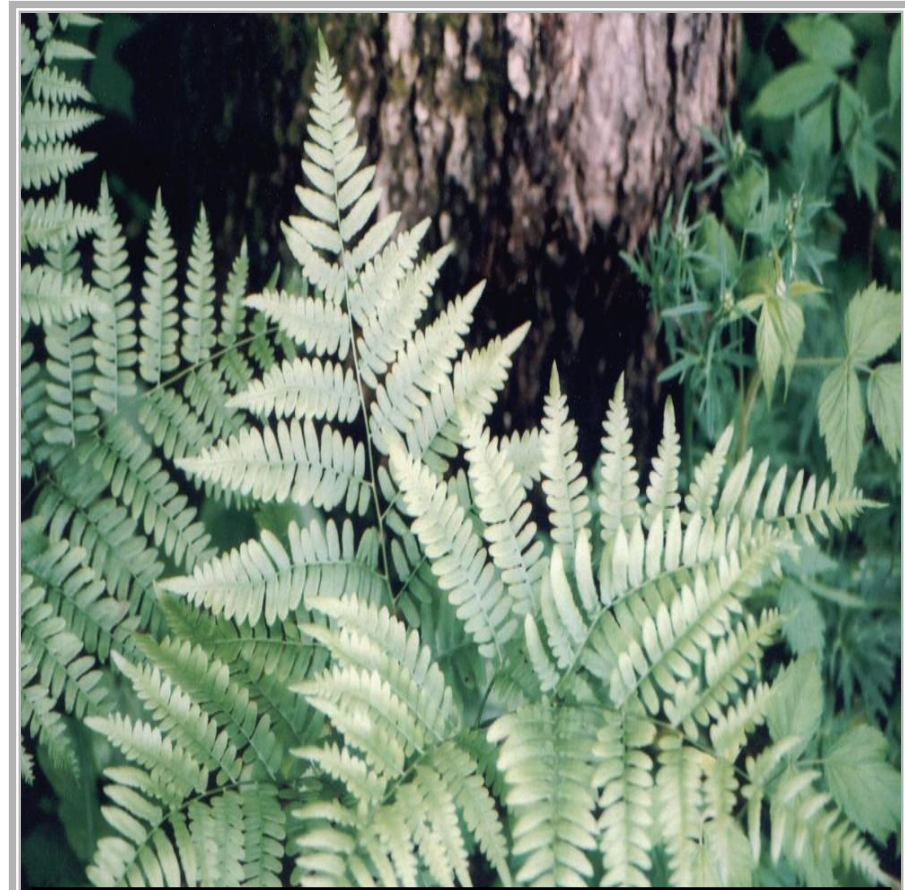


**TRACHEOPHYTE
REPRODUCTION
GAMETOPHYTE**

TRACHEOPHYTE GAMETOPHYTE VS SPOROPHYTE



GAMETOPHYTE



SPOROPHYTE



TRACHEOPHYTE GAMETOPHYTE VS SPOROPHYTE

GAMETOPHYTE

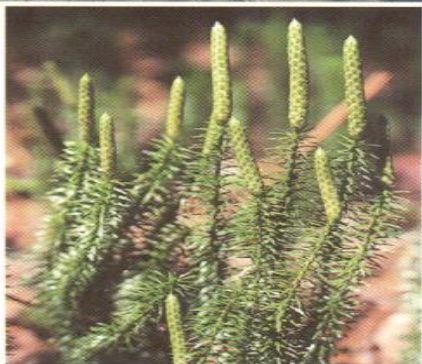
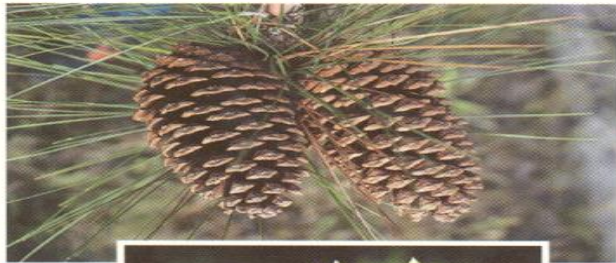
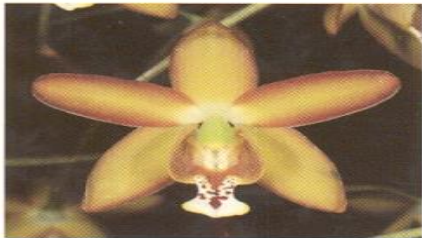


EPHEMERAL



SPOROPHYTE

TRACHEOPHYTE PHYLOGENY



GAMETOPHYTE

TRACHEOPHYTE GAMETOPHYTE VS SPOROPHYTE

GAMETOPHYTE



EPHEMERAL



SPOROPHYTE

TRACHEOPHYTE GAMETOPHYTE VS SPOROPHYTE

GAMETOPHYTE



REDUCTION



SPOROPHYTE



TRACHEOPHYTE REPRODUCTION SPOROPHYTE

TRACHEOPHYTE GAMETOPHYTE VS SPOROPHYTE

GAMETOPHYTE



EPHEMERAL



SPOROPHYTE



TRACHEOPHYTE GAMETOPHYTE VS SPOROPHYTE

GAMETOPHYTE



EPHEMERAL

SPOROPHYTE

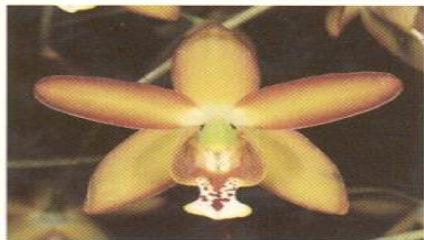


DOMINATE

TRACHEOPHYTE PHYLOGENY



SPOROPHYTE



TRACHEOPHYTE GAMETOPHYTE VS SPOROPHYTE

GAMETOPHYTE



REDUCTION

SPOROPHYTE



DOMINATE

TRACHEOPHYTE GAMETOPHYTE VS SPOROPHYTE

GAMETOPHYTE



REDUCTION

SPOROPHYTE



AUGMENTS



TRACHEOPHYTE

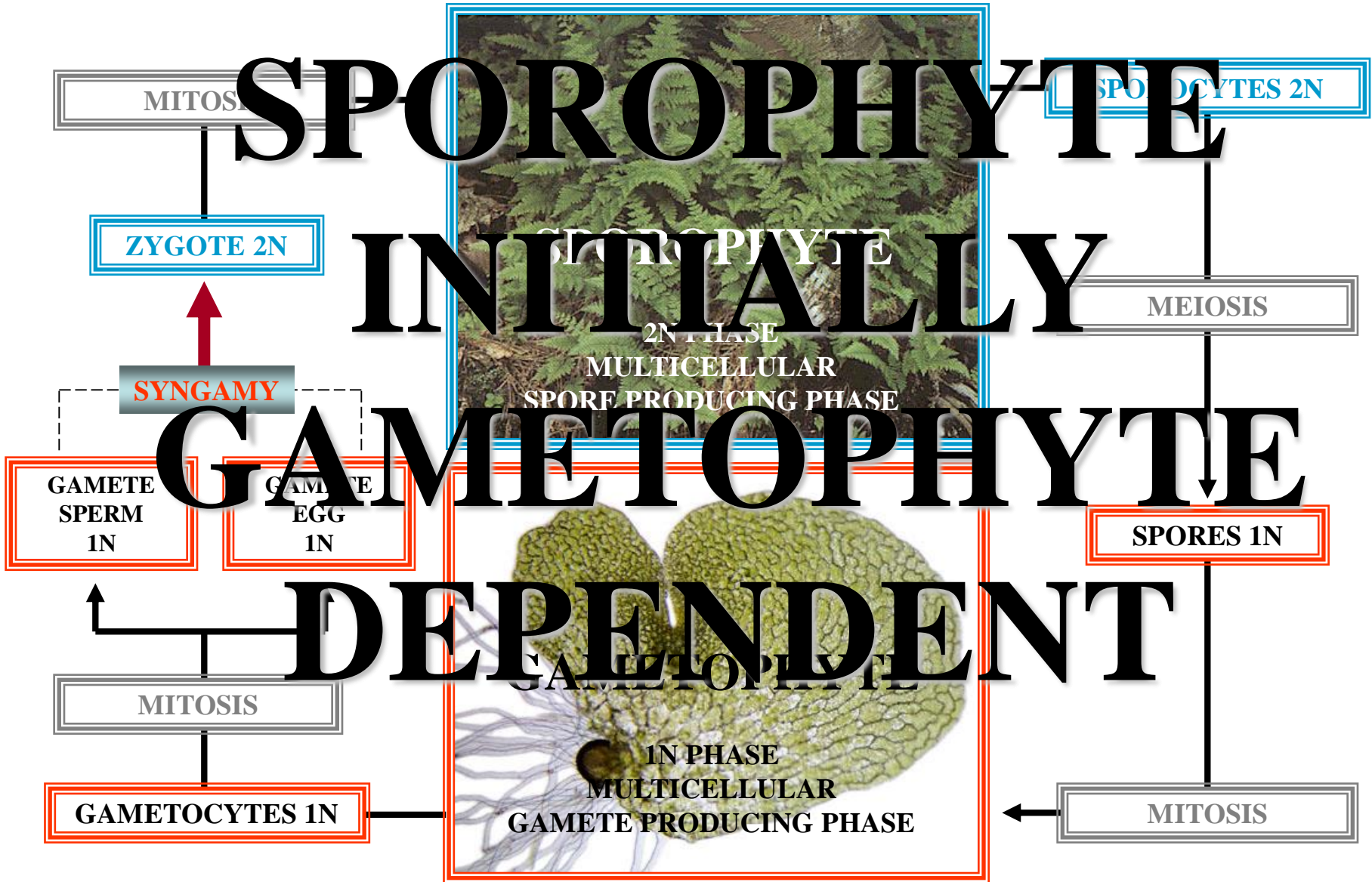
HETEROMORPHIC SPORIC LIFE CYCLE

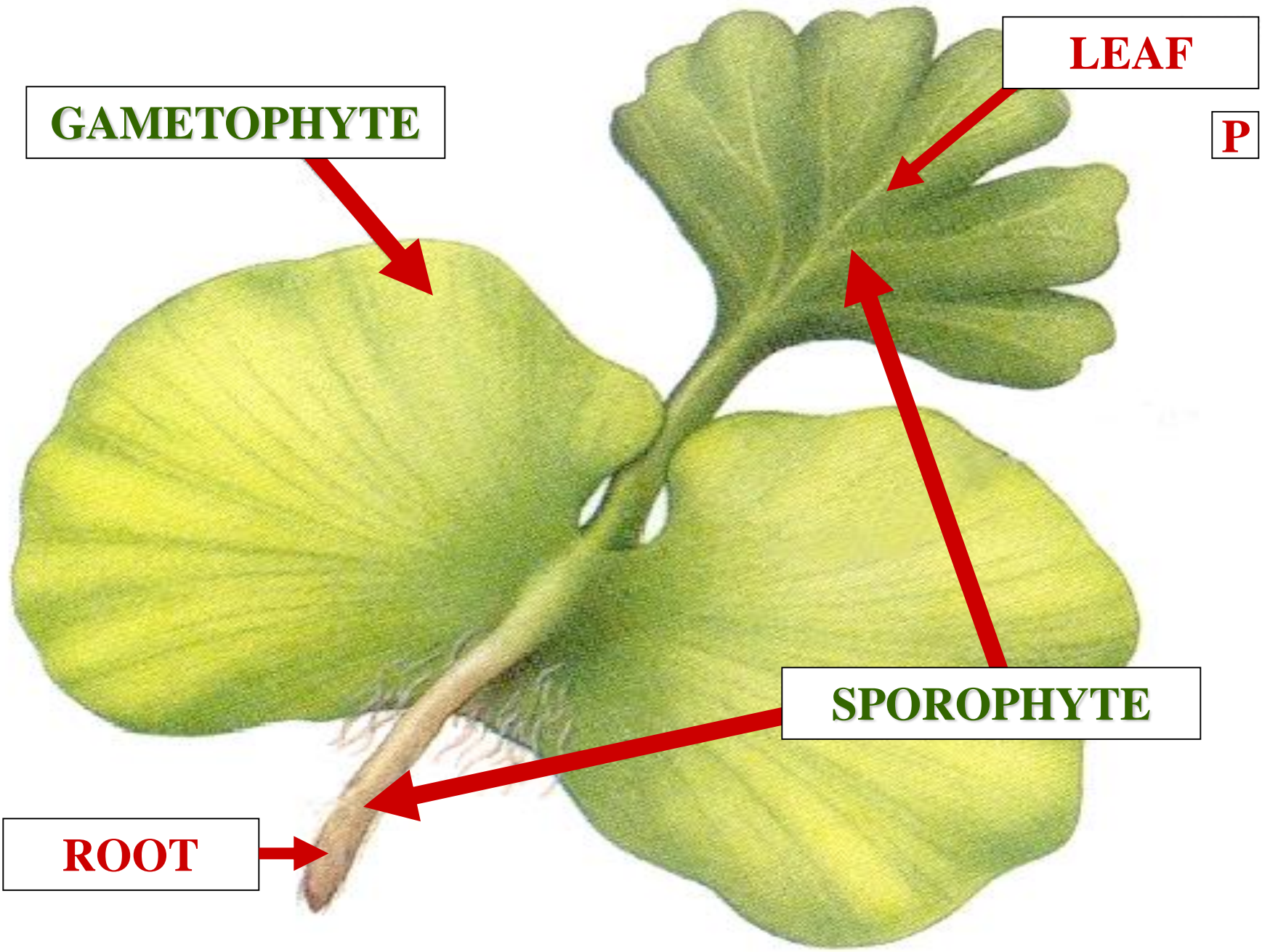
SPORO PHYTE

INITIALLY

GAMETO PHYTE

DEPENDENT





GAMETOPHYTE

LEAF

P

SPOROPHYTE

ROOT

LEAF

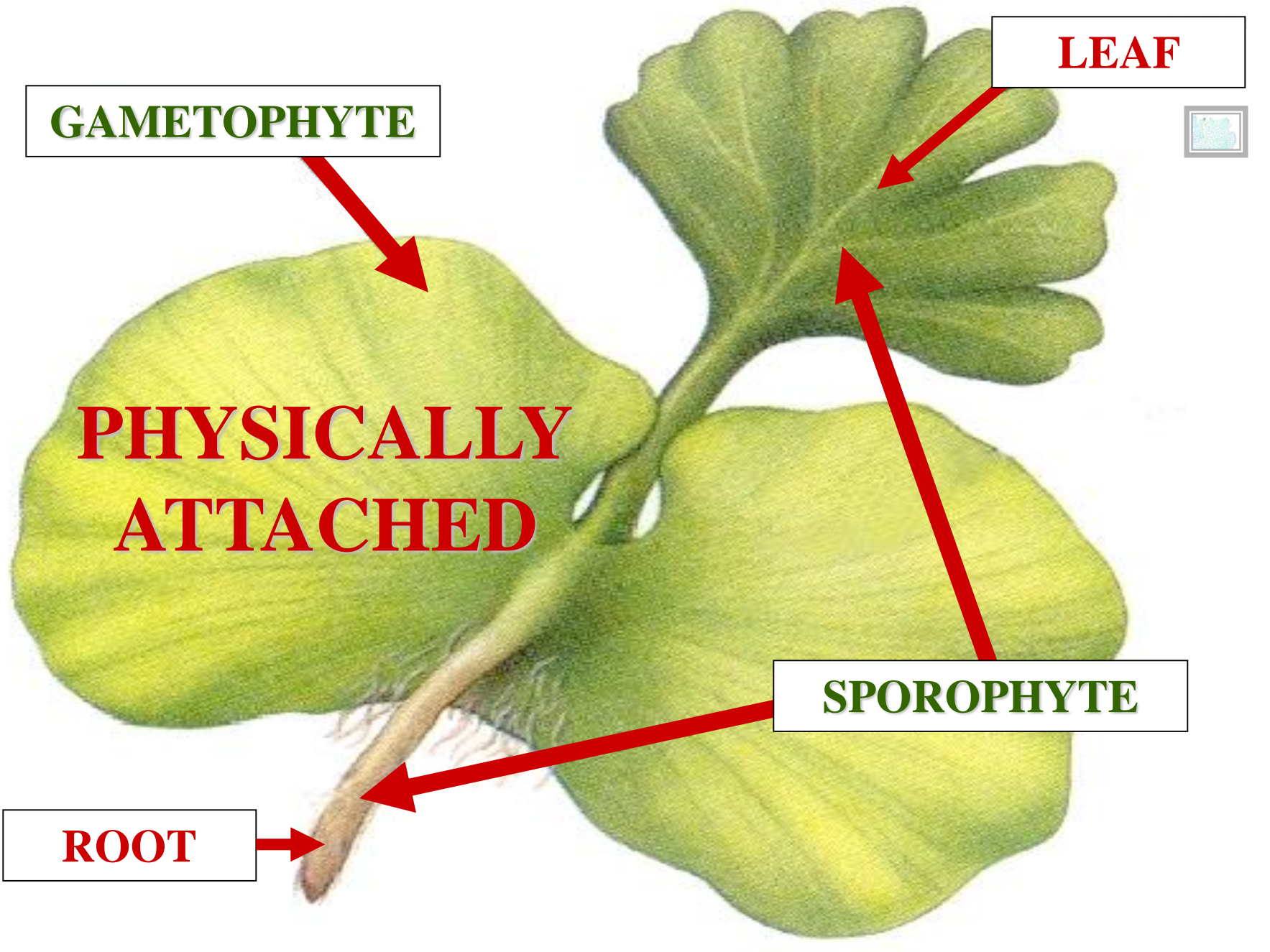
GAMETOPHYTE

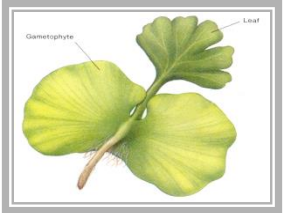
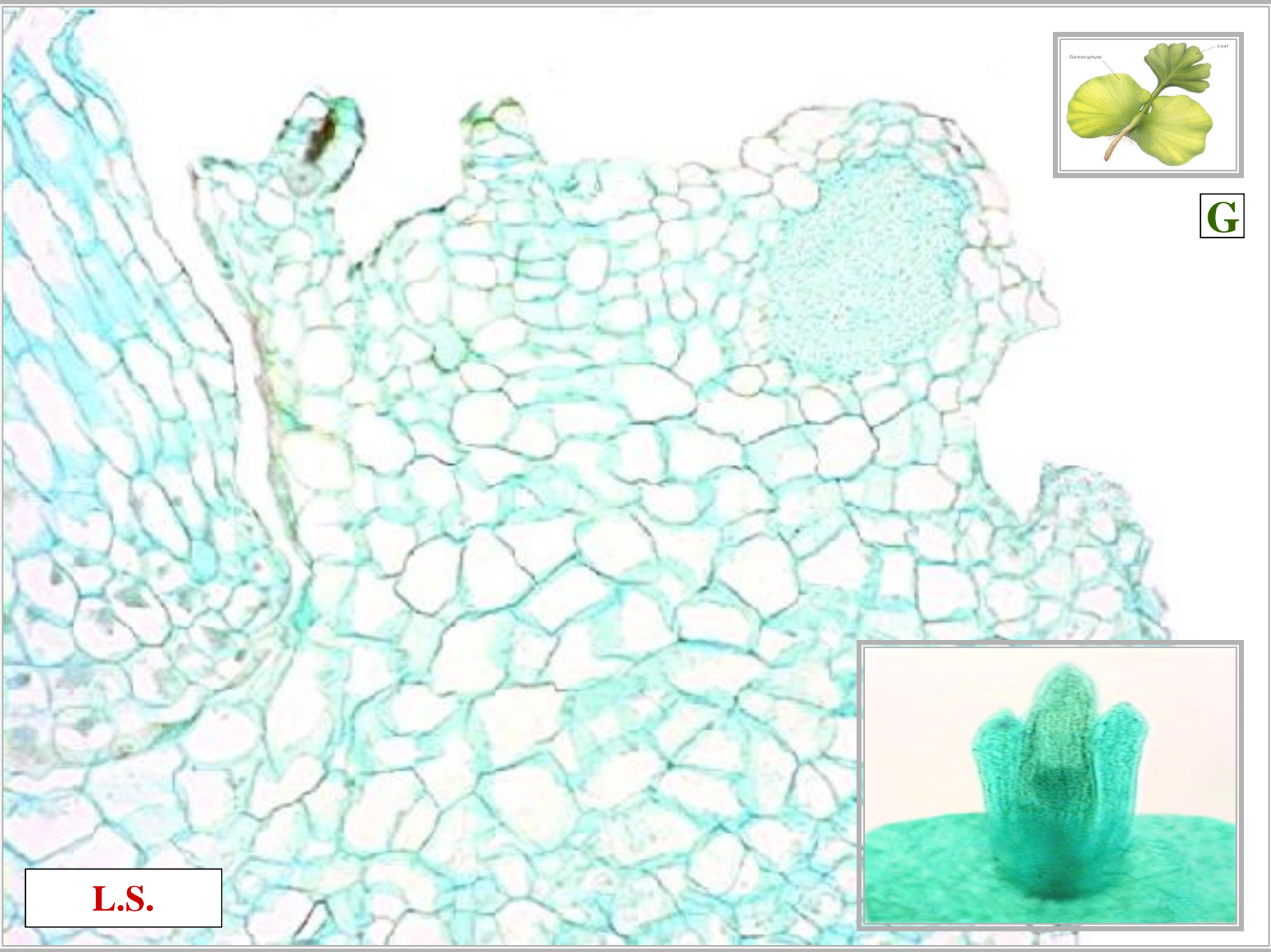


**PHYSICALLY
ATTACHED**

SPOROPHYTE

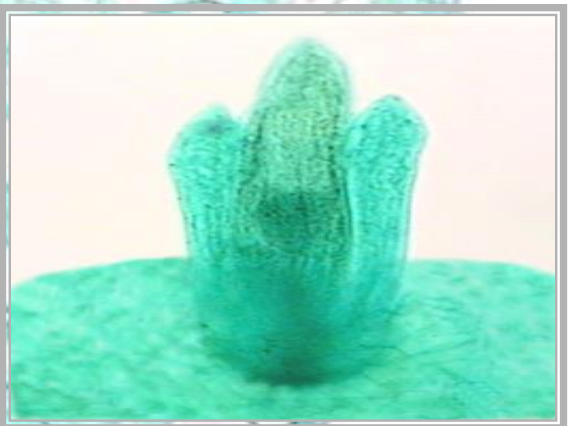
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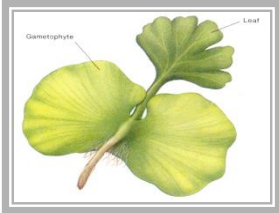
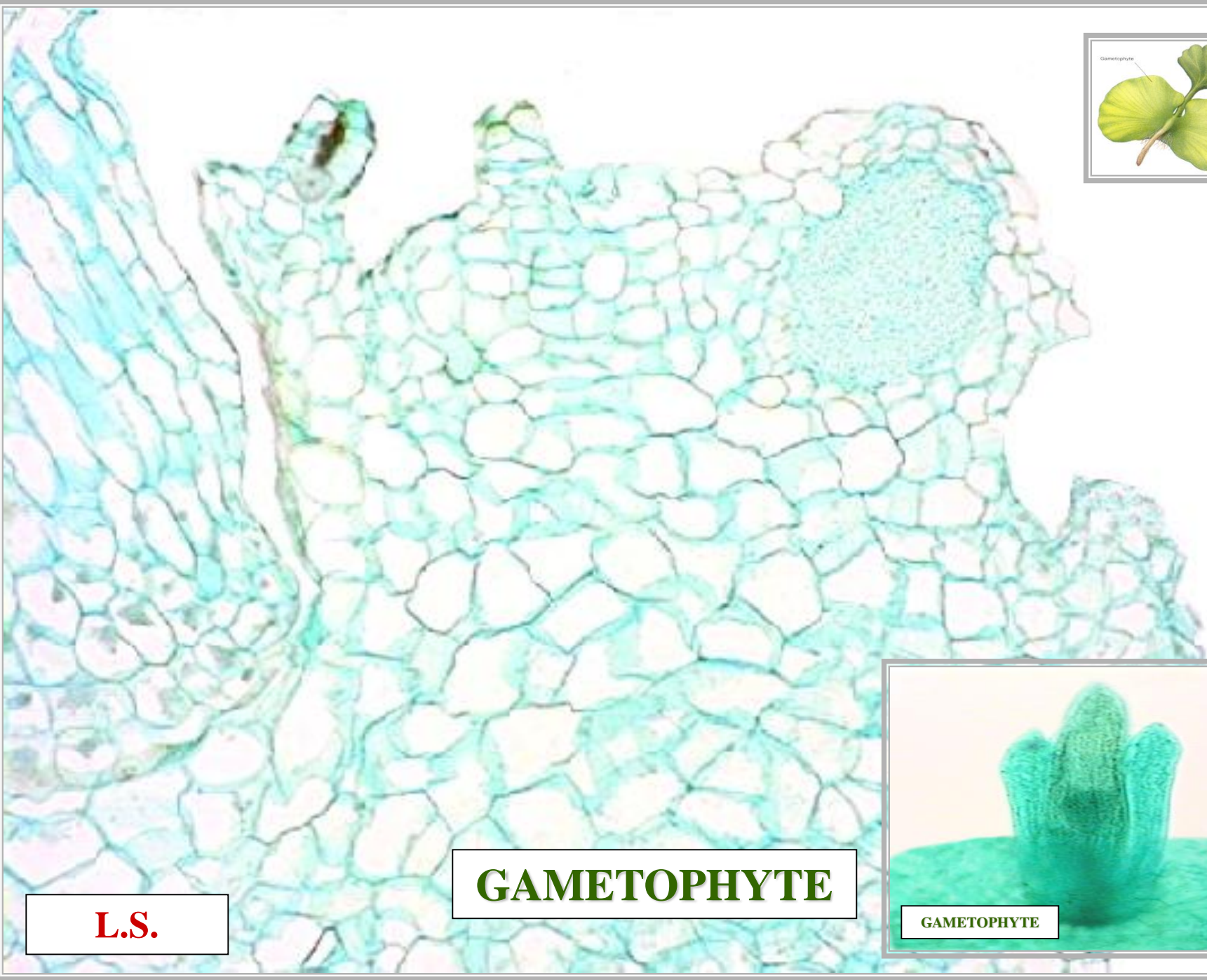




G

L.S.





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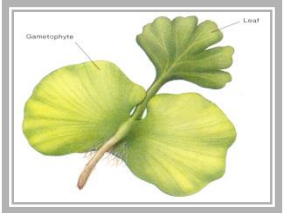
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GAMETOPHYTE



GAMETOPHYTE



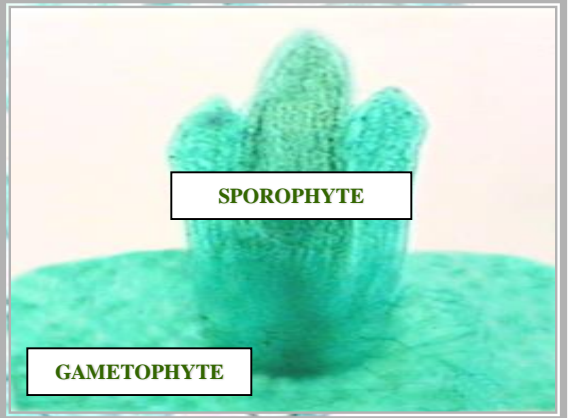
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SPOROPHYTE

L.S.

GAMETOPHYTE



SPOROPHYTE

GAMETOPHYTE