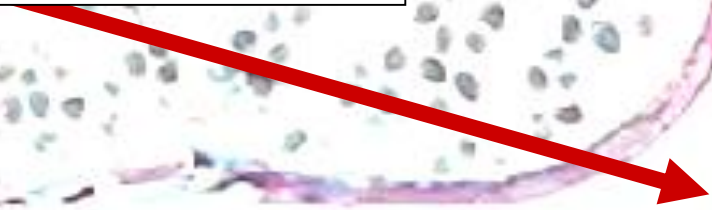


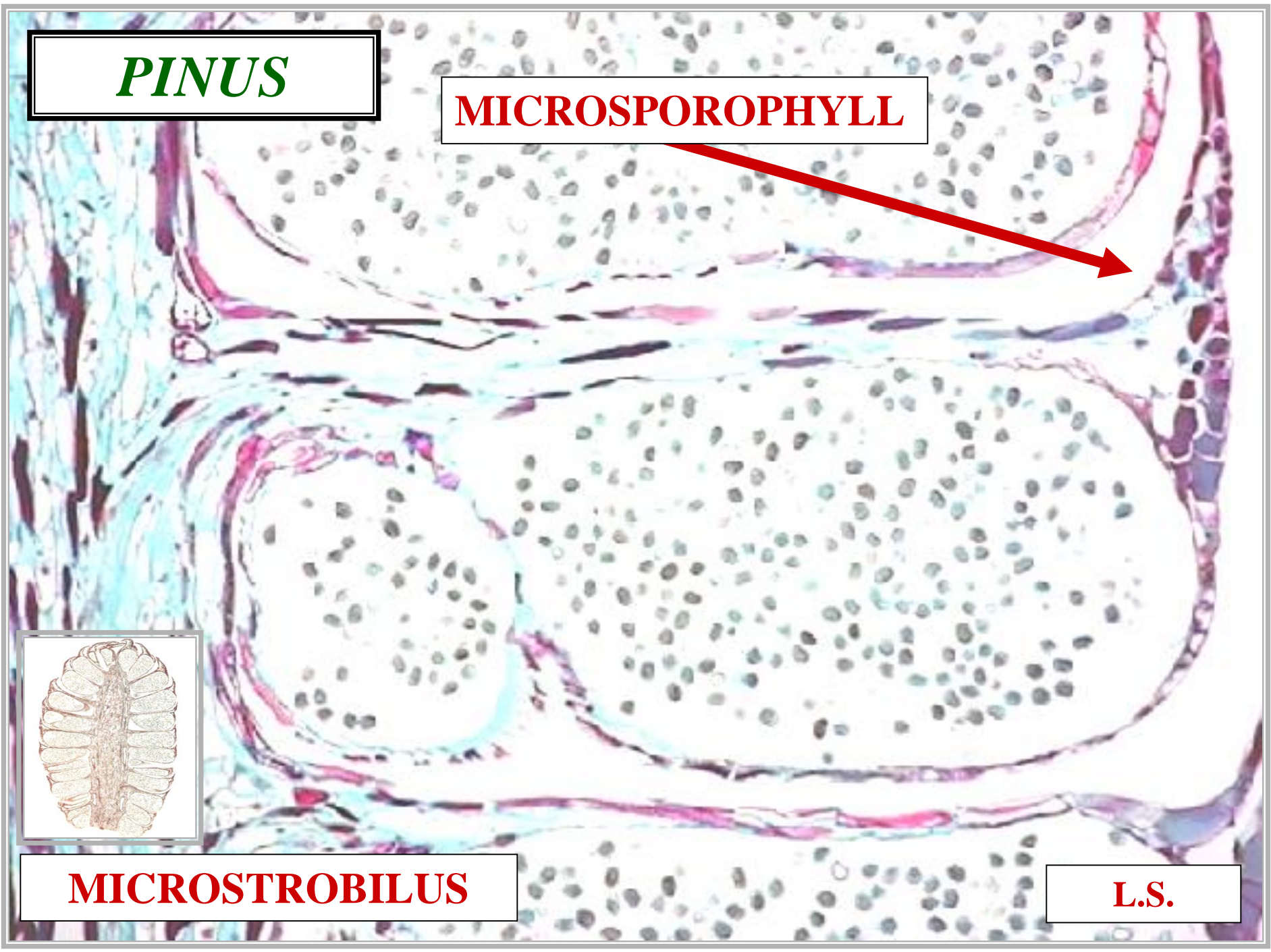
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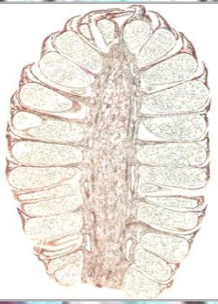
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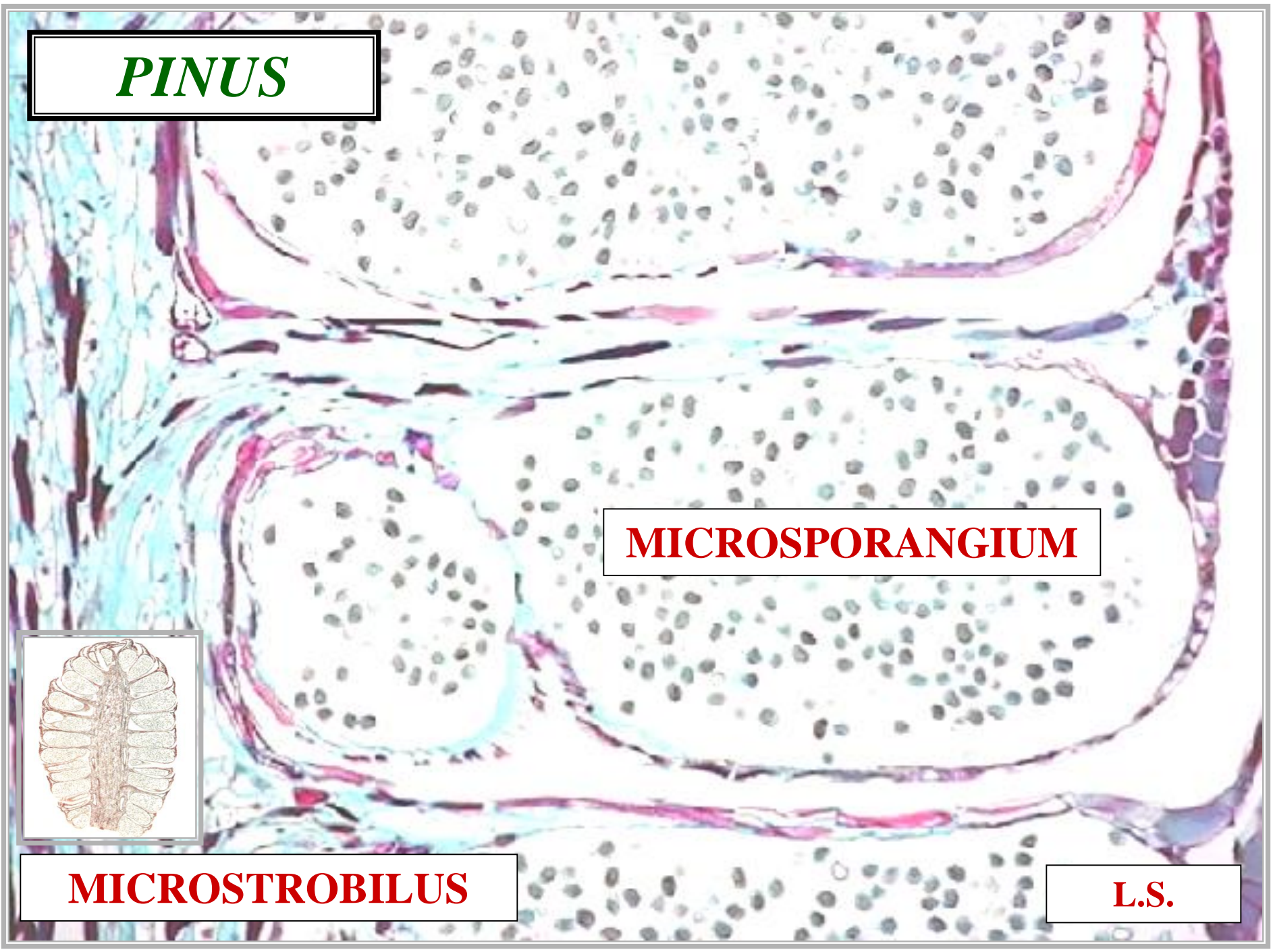
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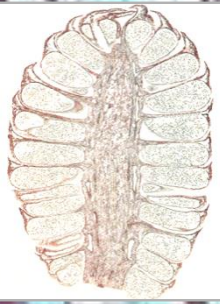
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MICROSPOROCYTES



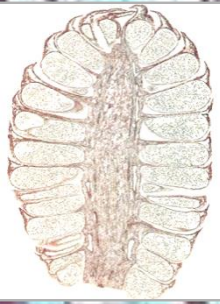
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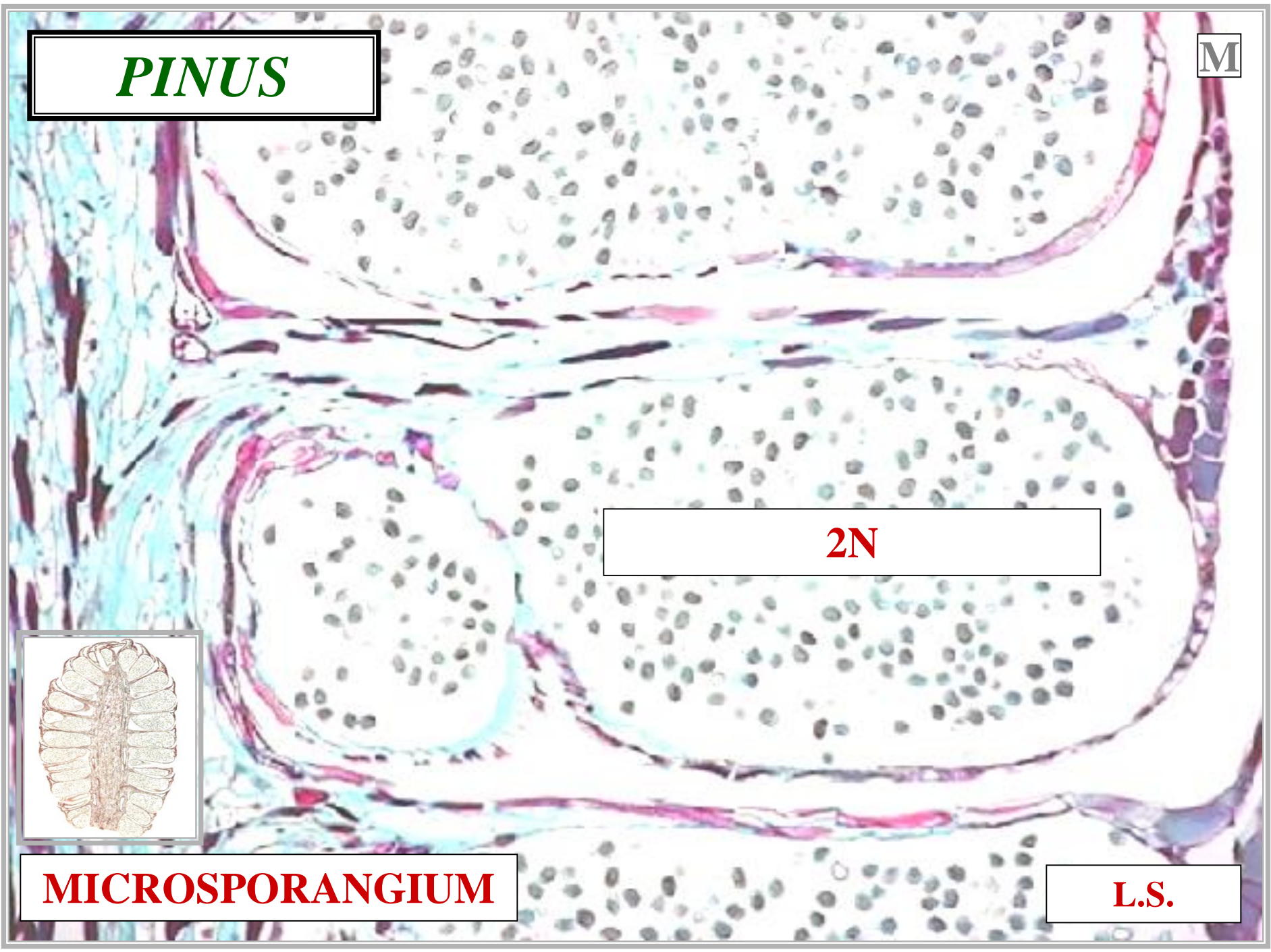
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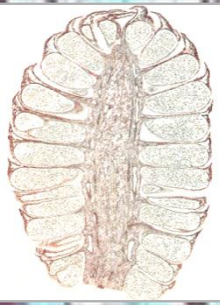
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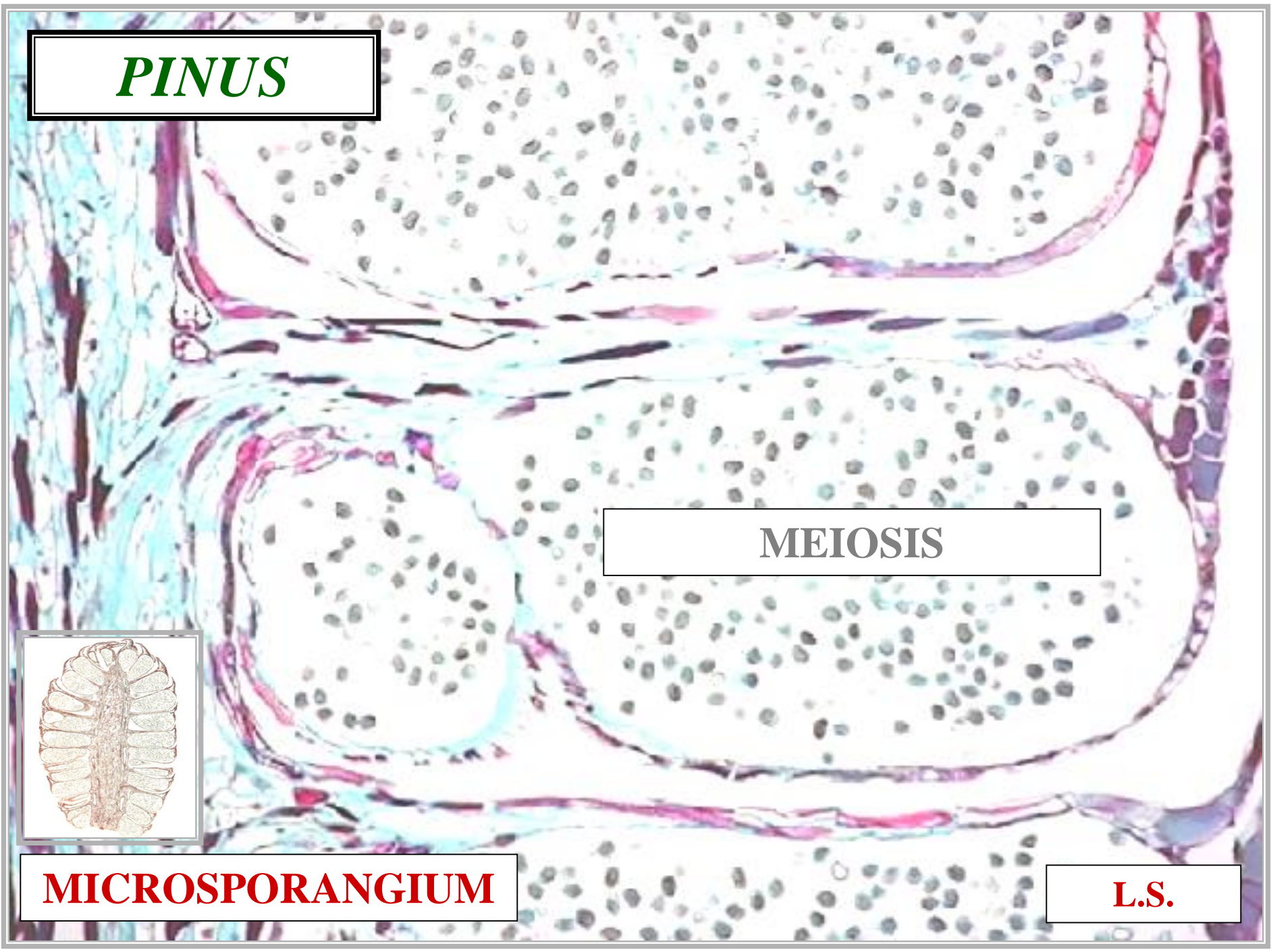
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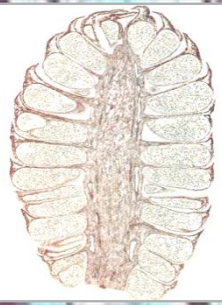
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MICROSPORES



MICROSPORANGIUM

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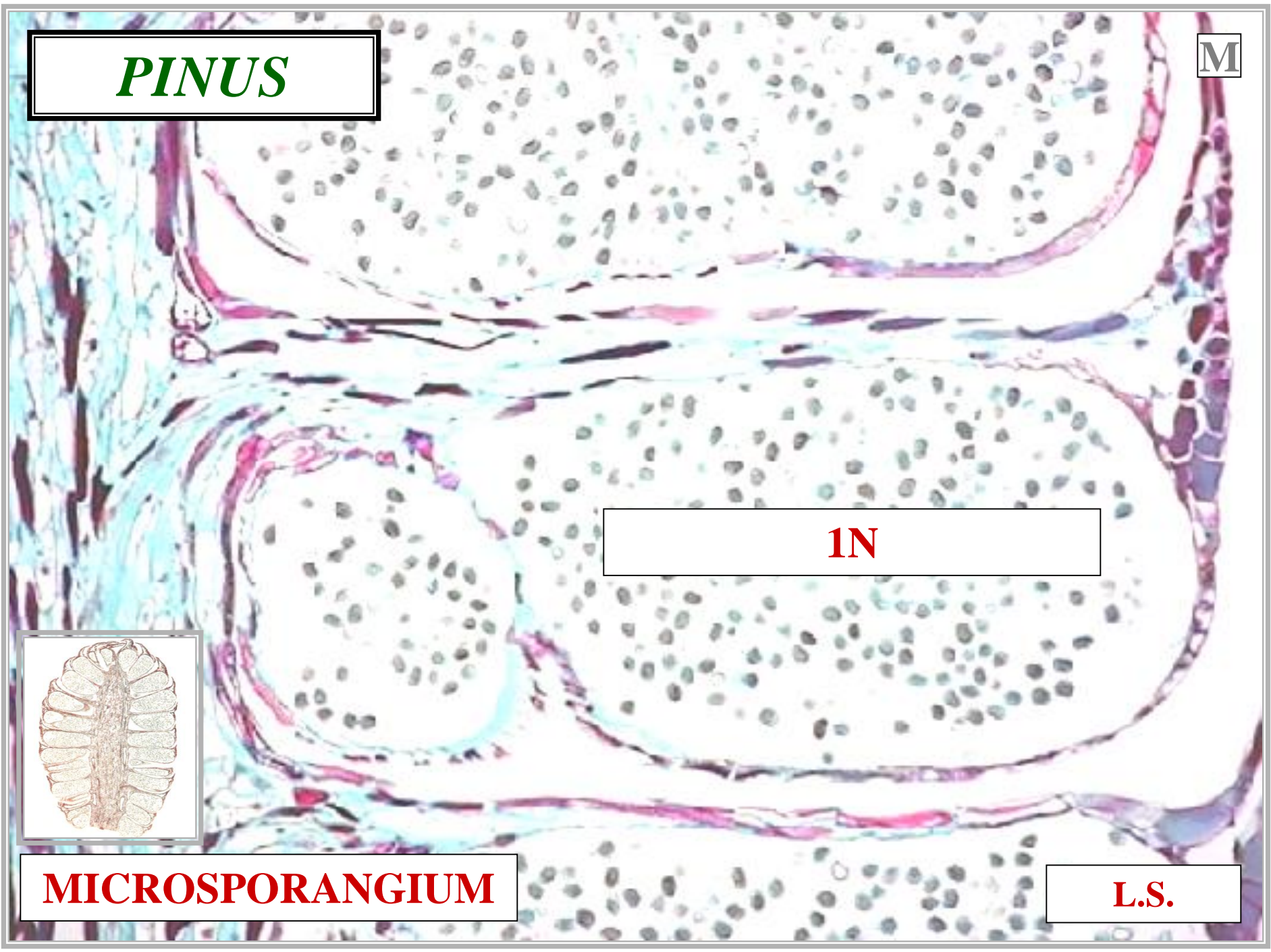
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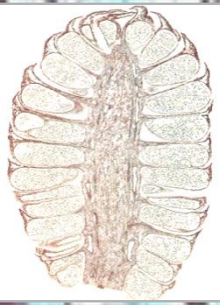
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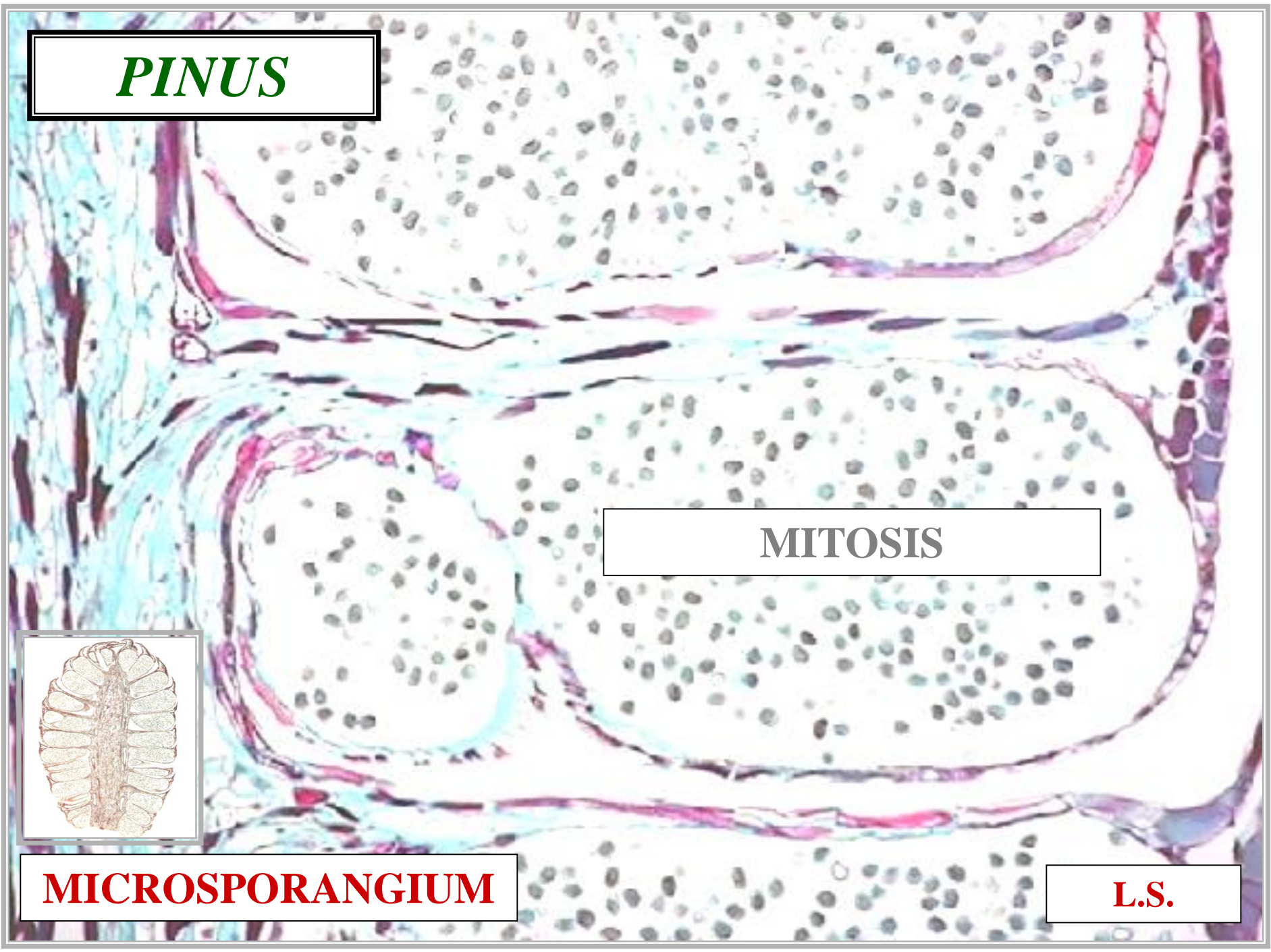
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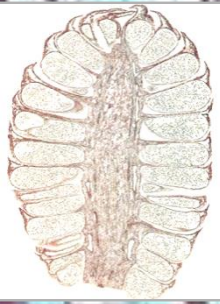
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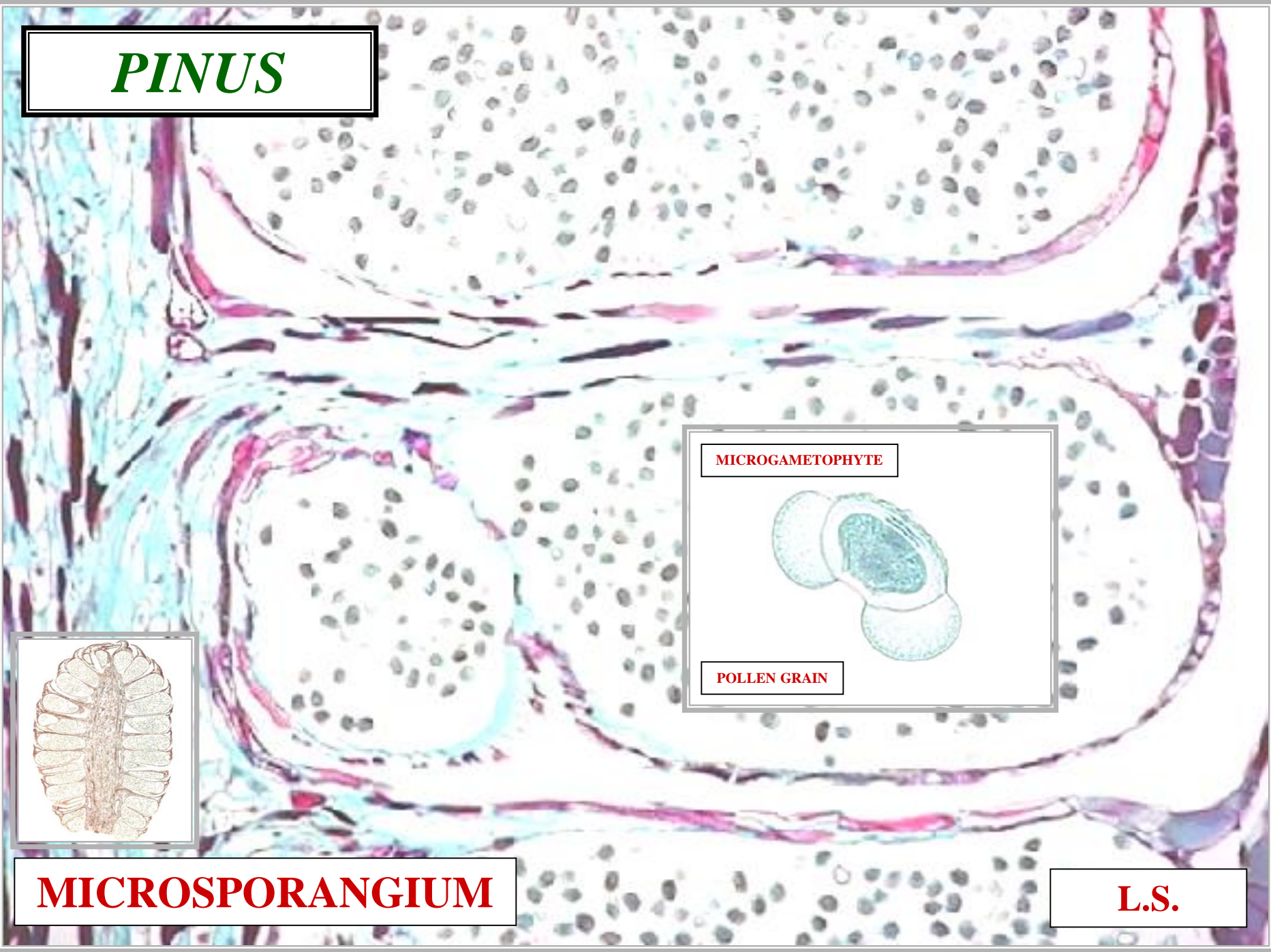
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MICROGAMETOPHYTE



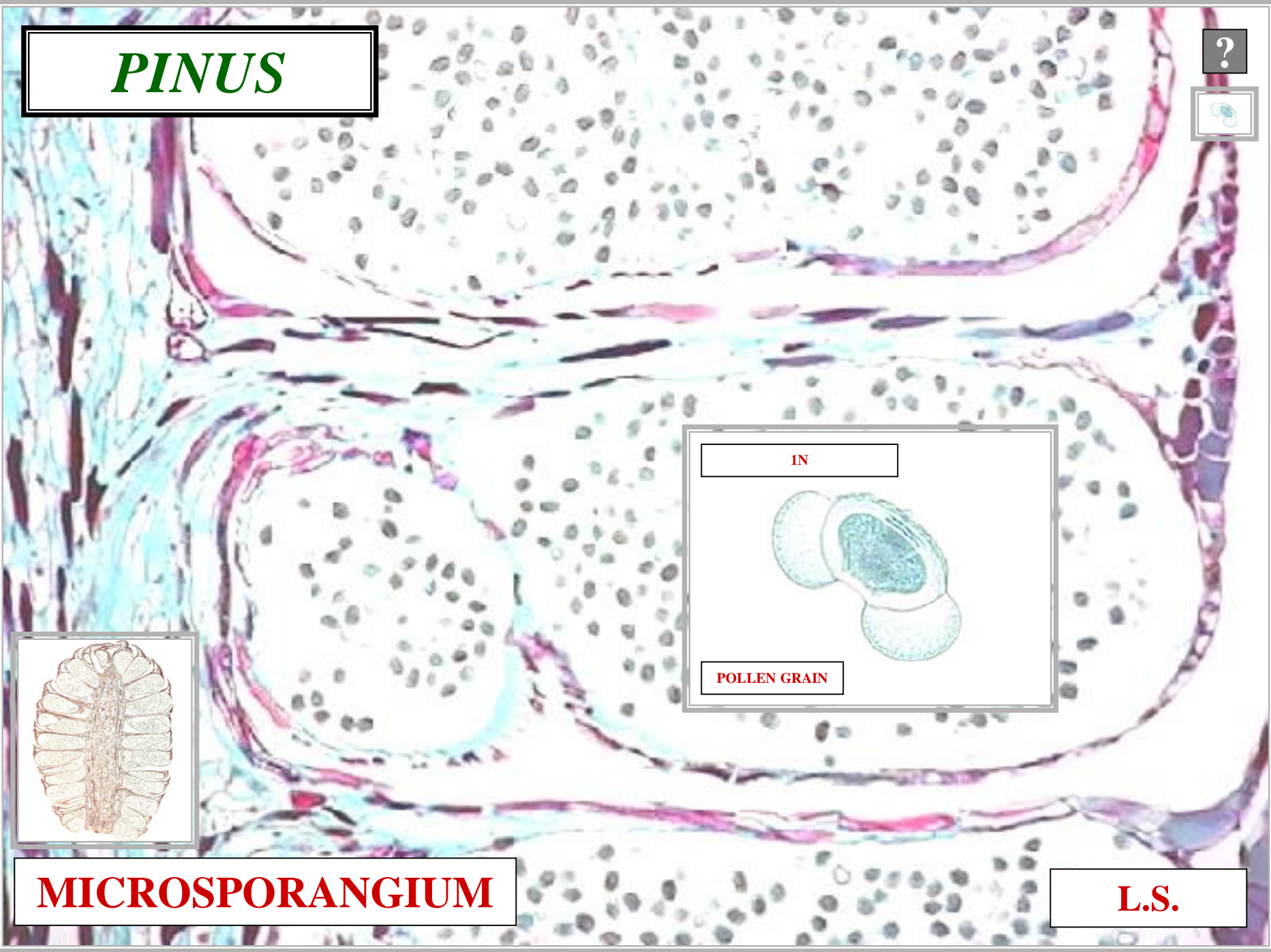
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MICROSPORANGIUM

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PINUS



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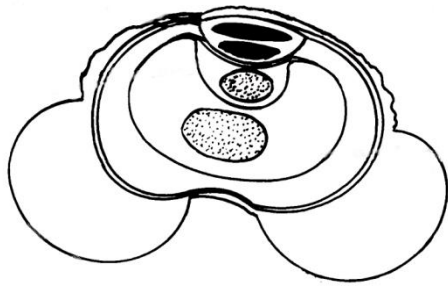
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MICROSPORANGIUM

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MICROGAMETOPHYTE



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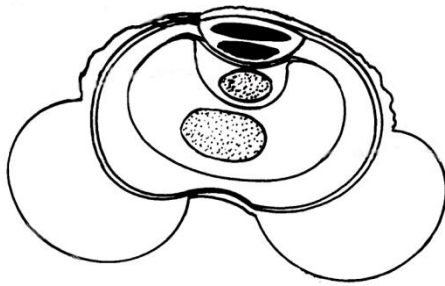
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MICROGAMETOPHYTE

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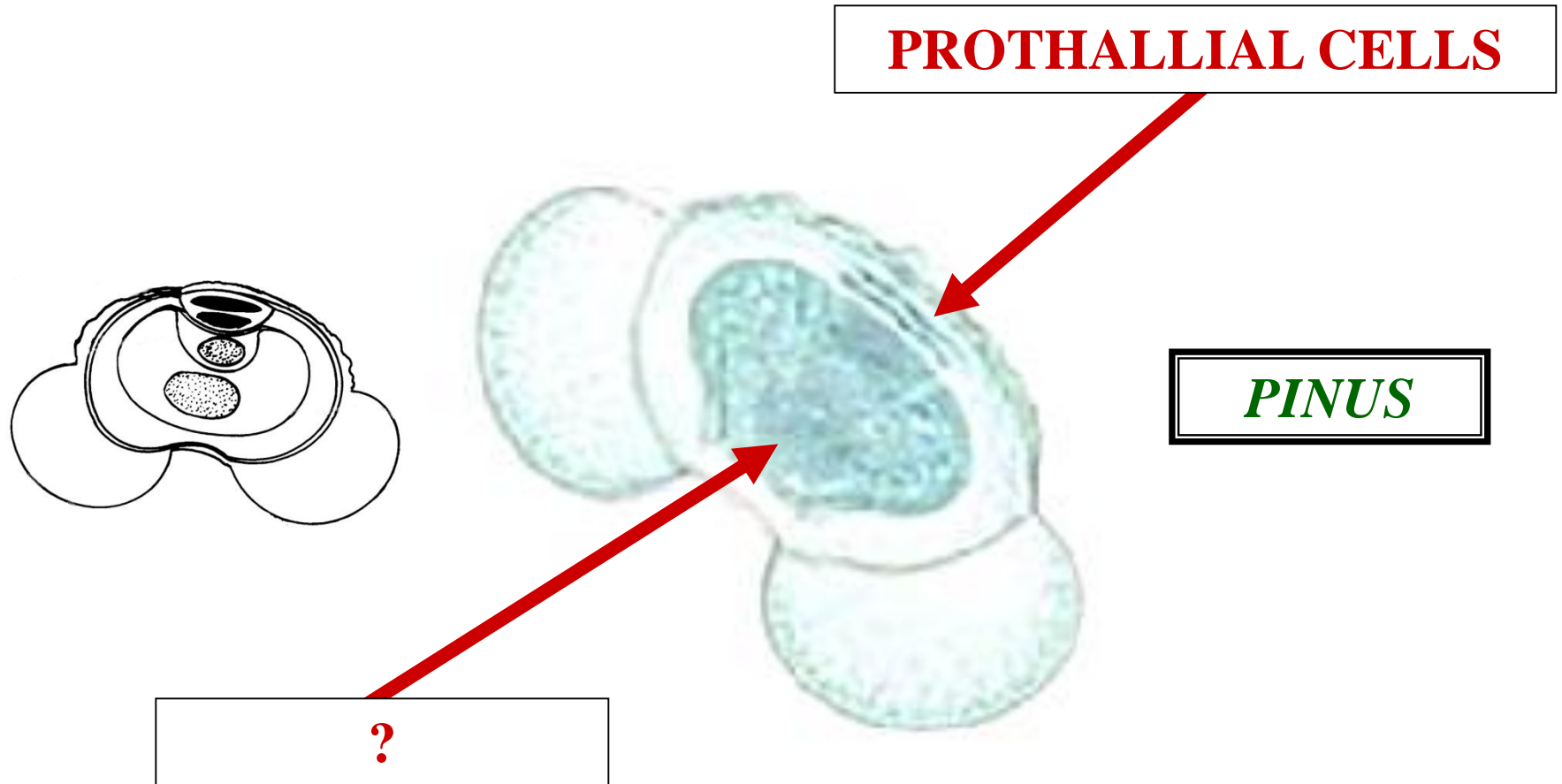
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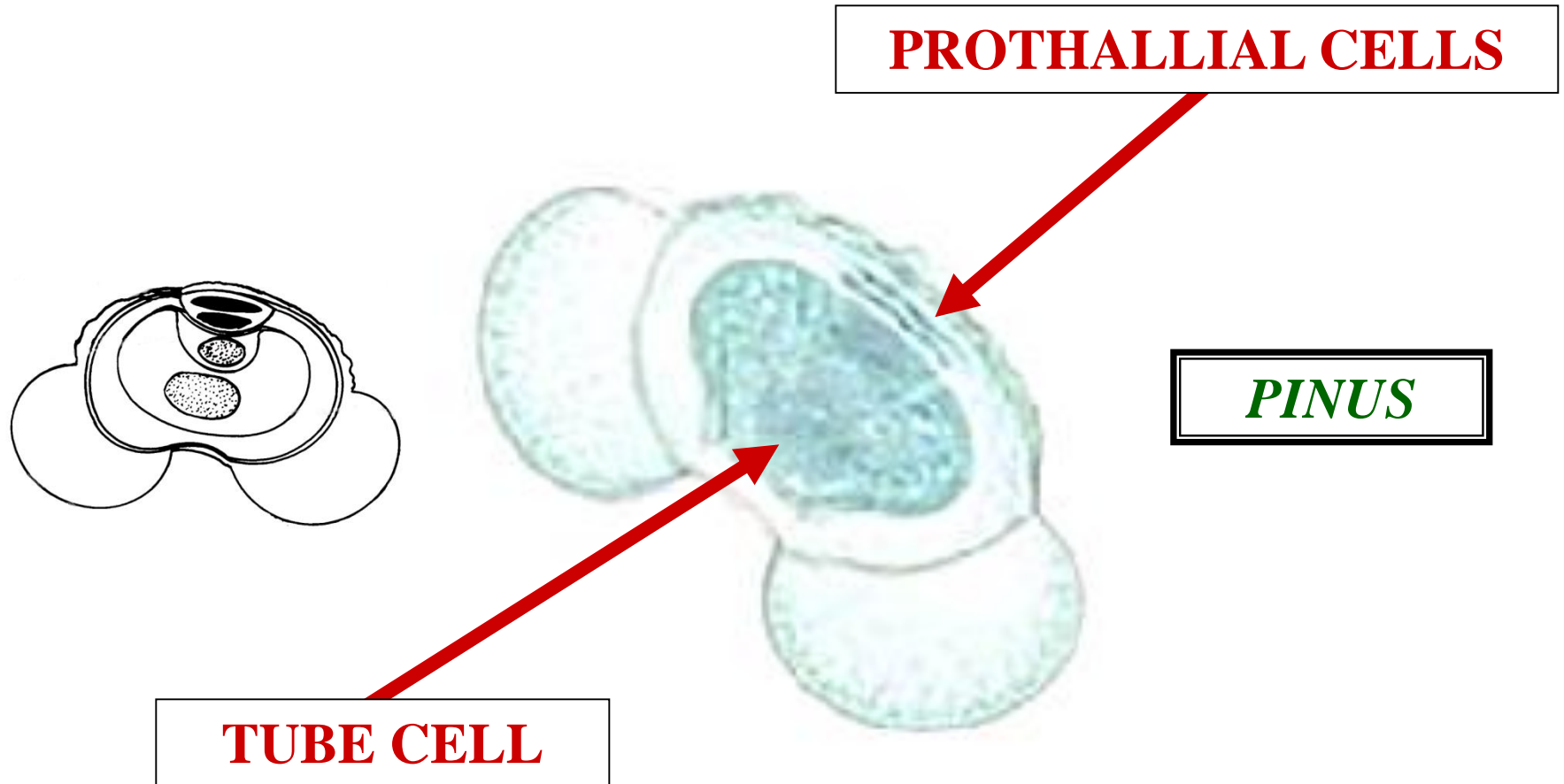
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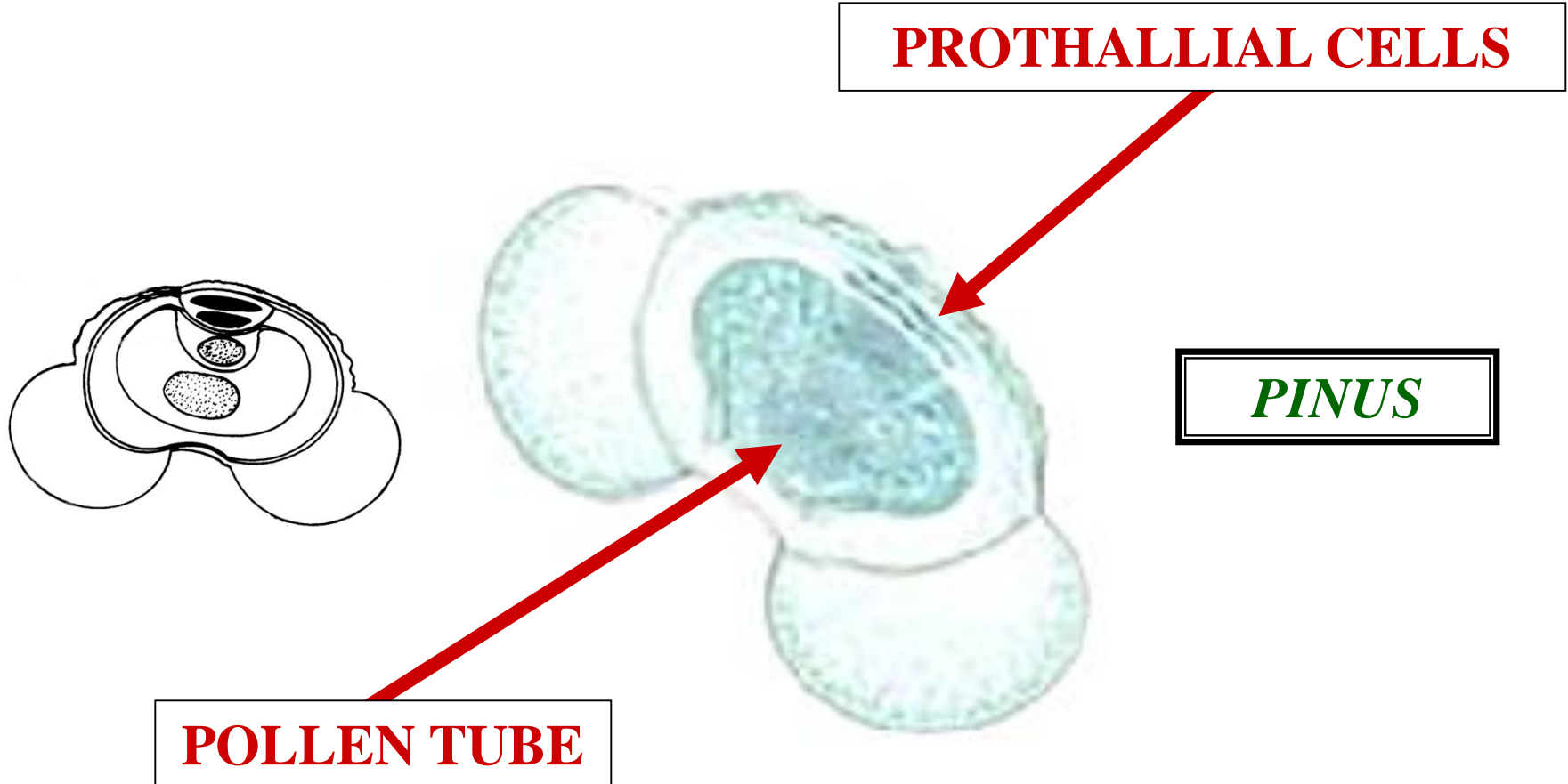
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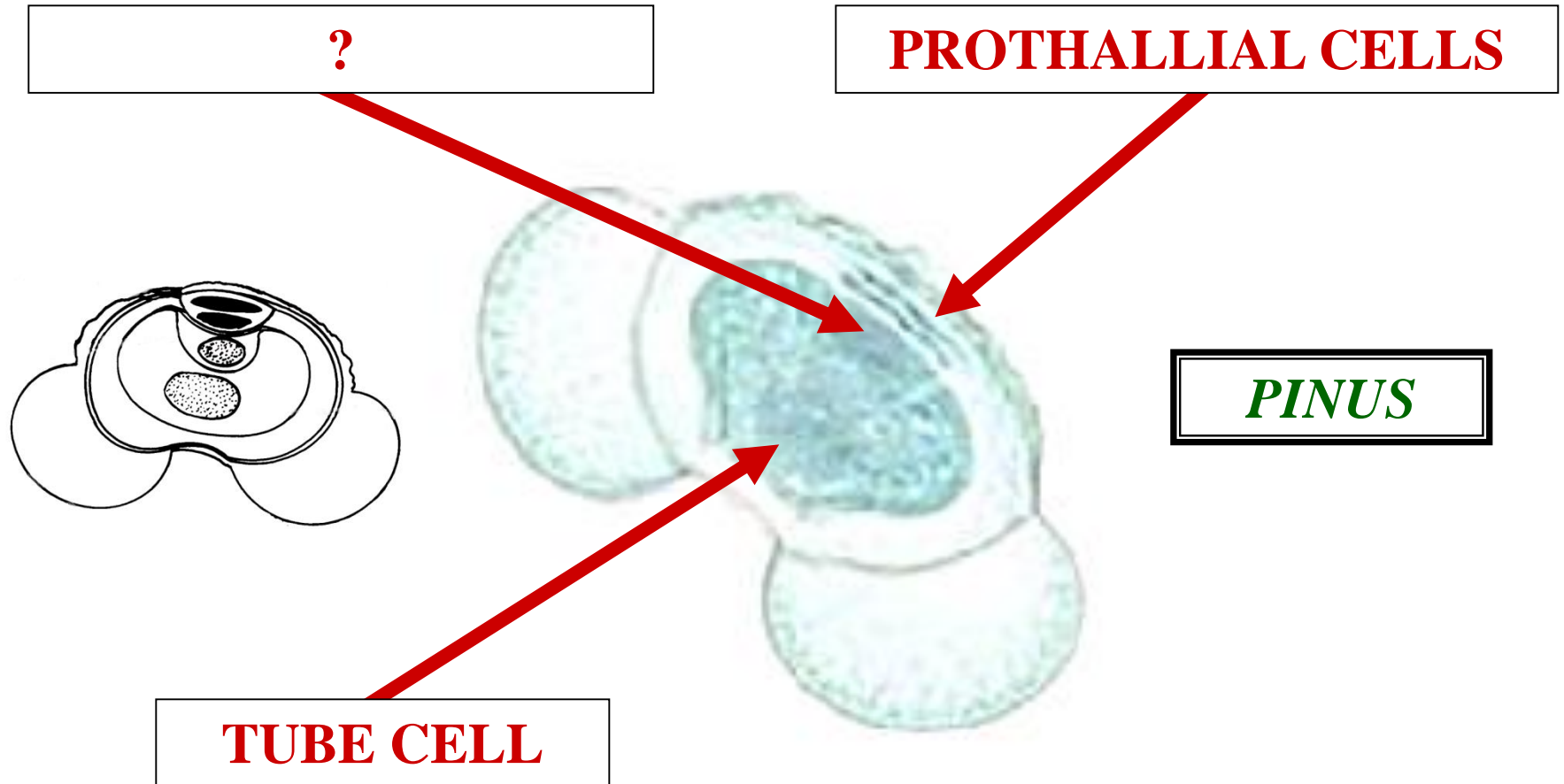
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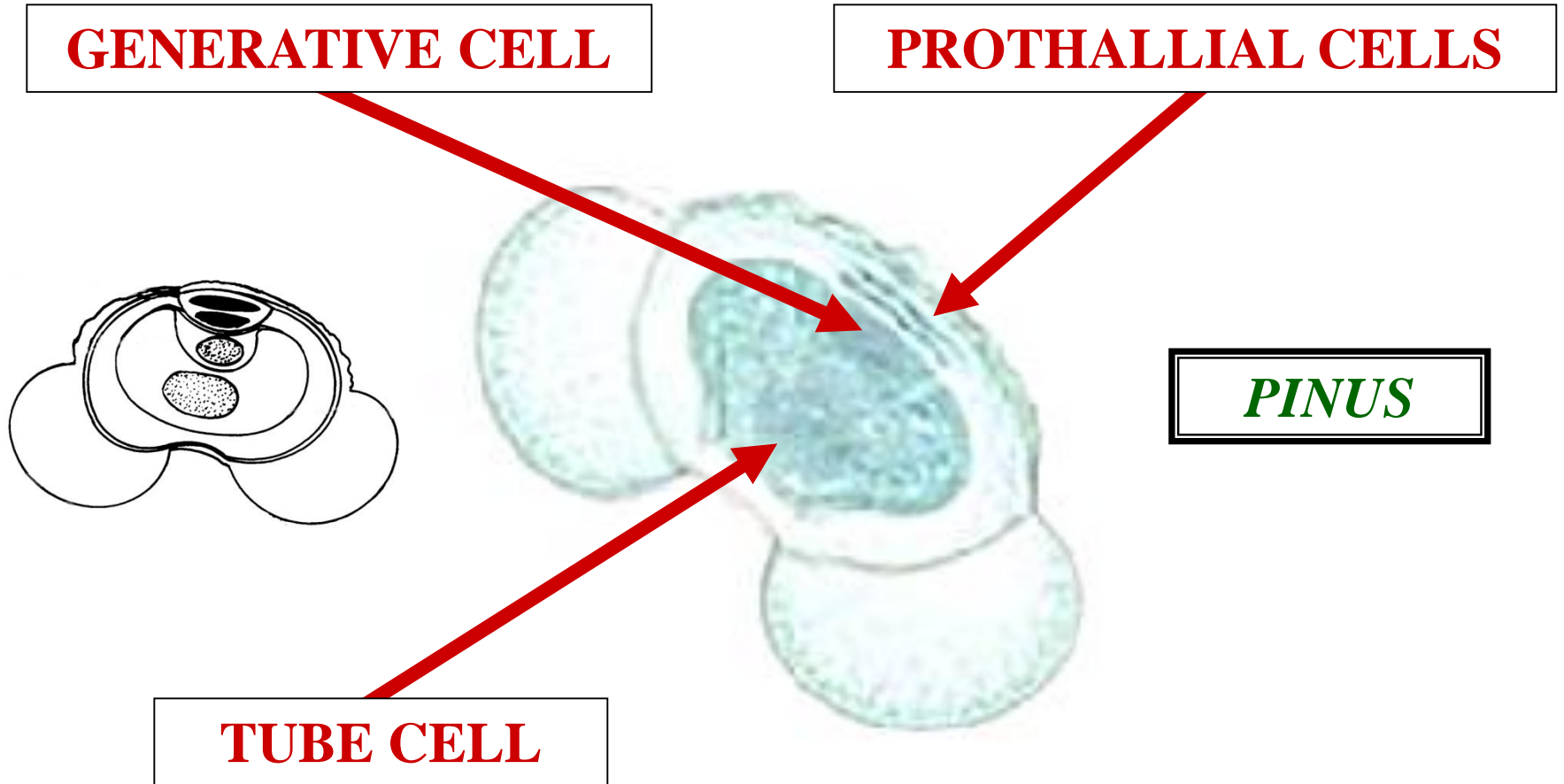
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MICROGAMETOPHYTE



POLLEN GRAIN

MICROGAMETOPHYTE

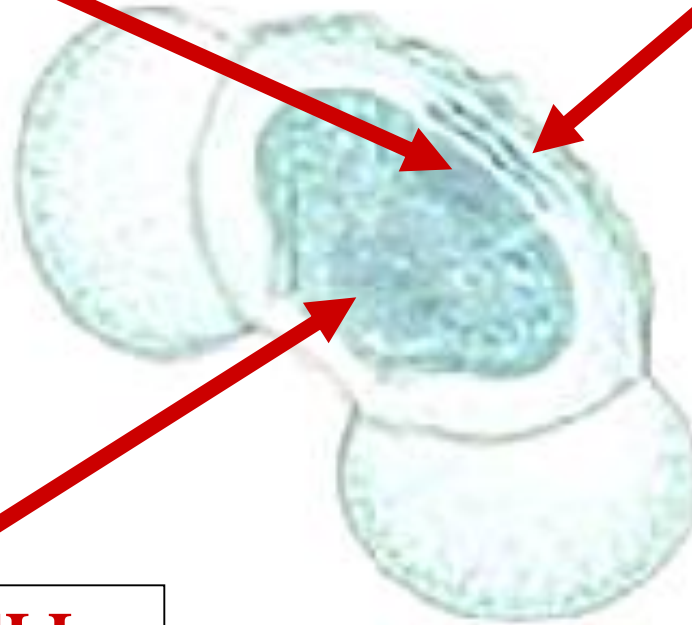
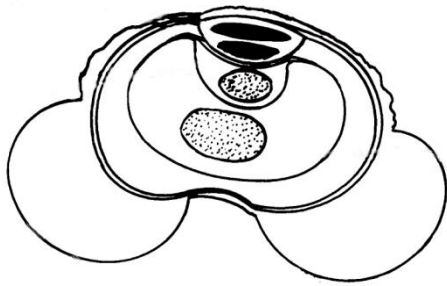


POLLEN GRAIN

MICROGAMETOPHYTE

MITOSIS

PROTHALLIAL CELLS



PINUS

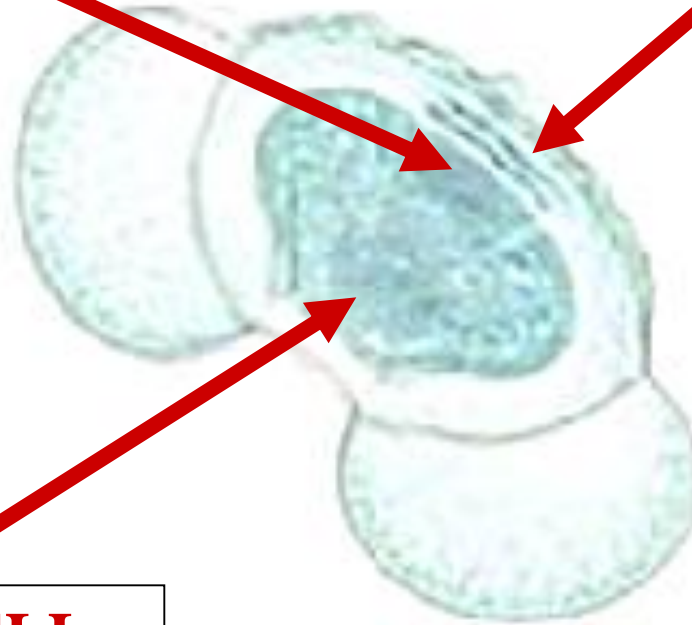
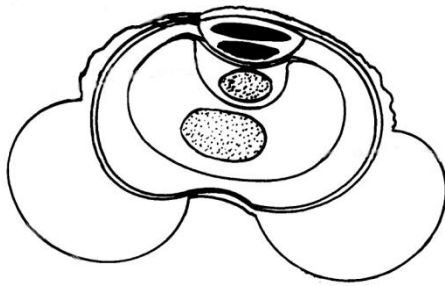
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POLLEN GRAIN

MICROGAMETOPHYTE

STERILE CELL

PROTHALLIAL CELLS



TUBE CELL

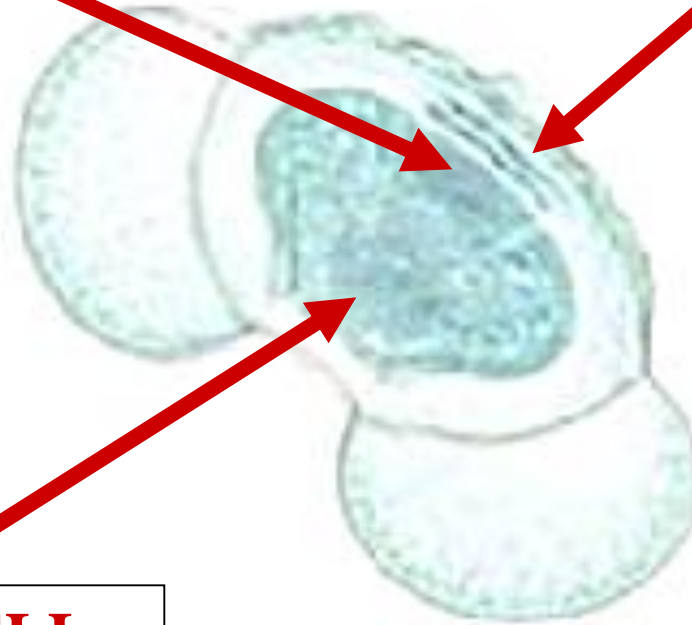
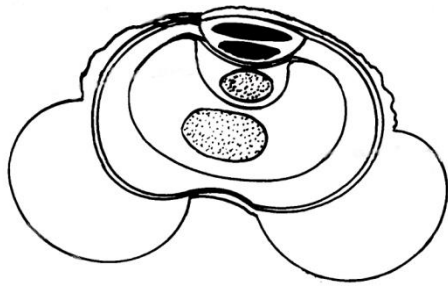
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MICROGAMETOPHYTE

SPERMATOCYTE

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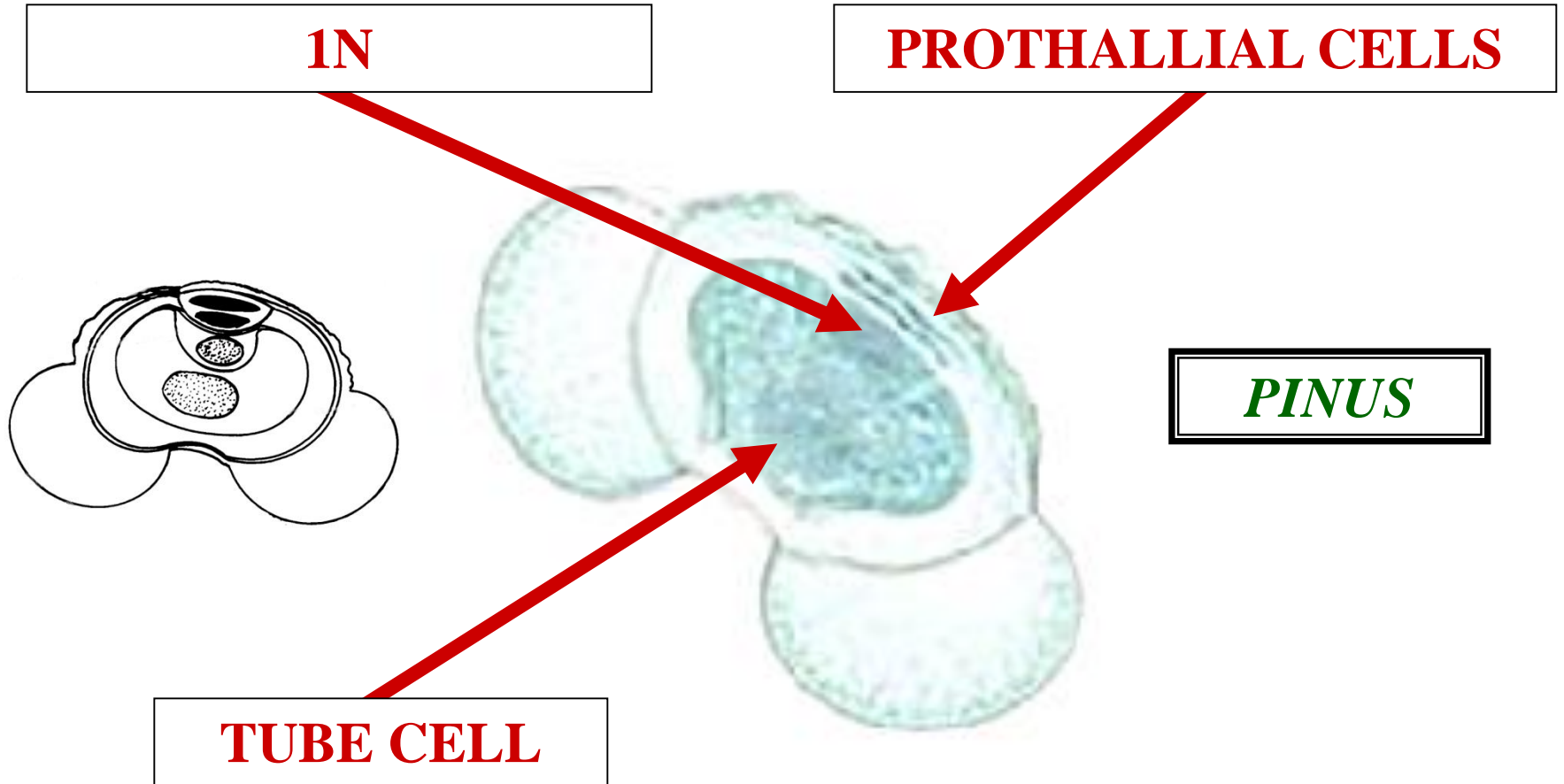


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TUBE CELL

POLLEN GRAIN

MICROGAMETOPHYTE

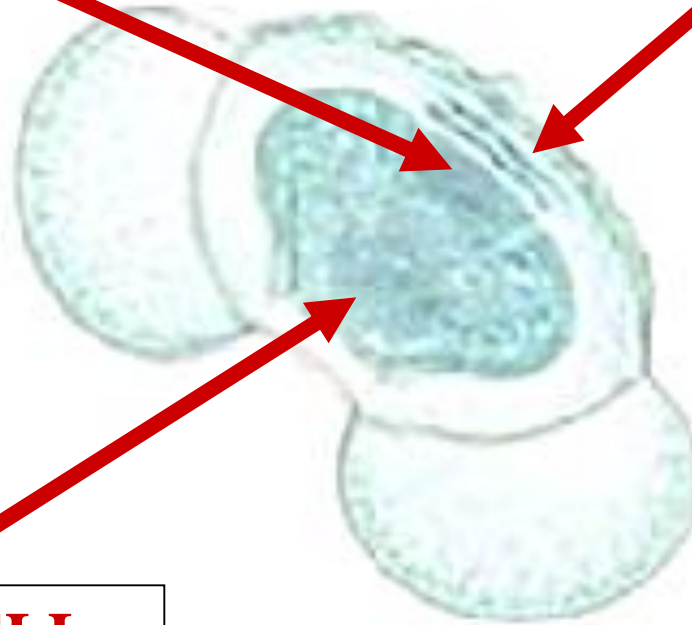
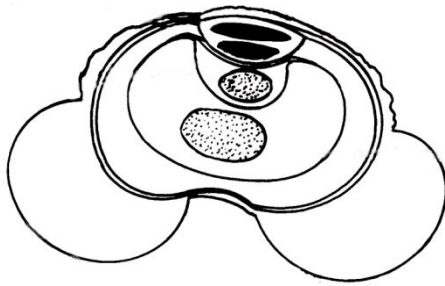


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MICROGAMETOPHYTE

MITOSIS

PROTHALLIAL CELLS



TUBE CELL

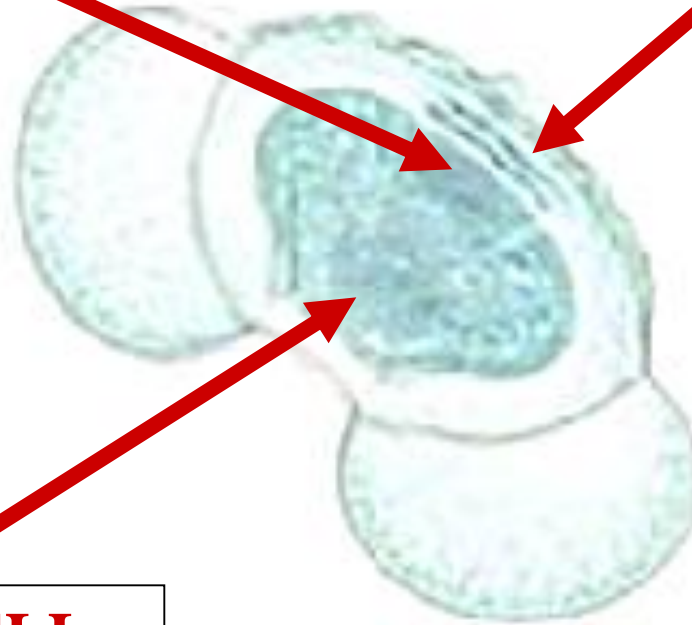
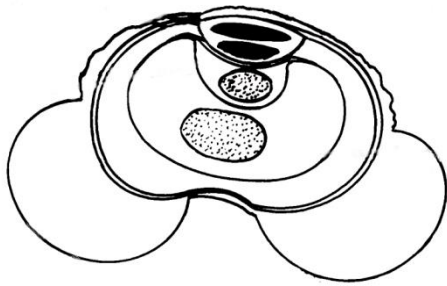
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MICROGAMETOPHYTE

2 SPERM CELLS

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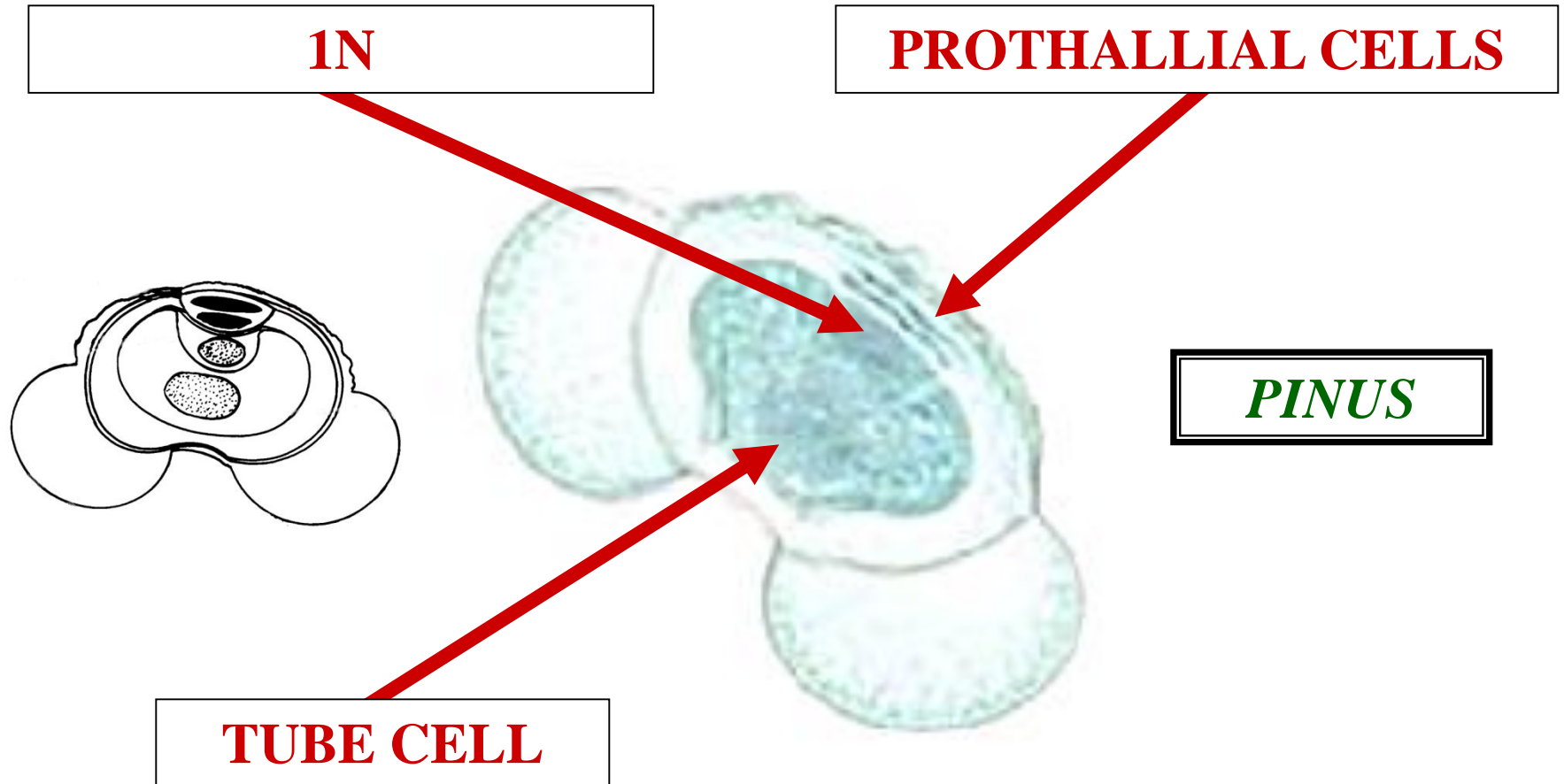


TUBE CELL

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POLLEN GRAIN

MICROGAMETOPHYTE

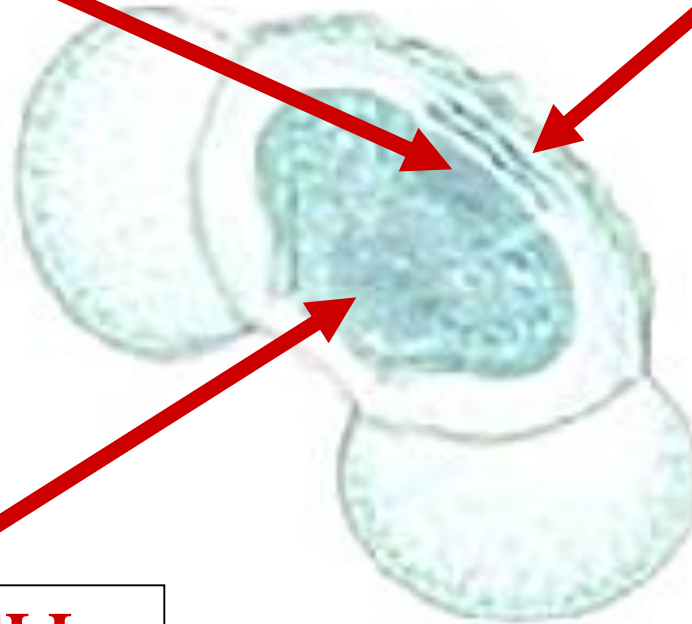
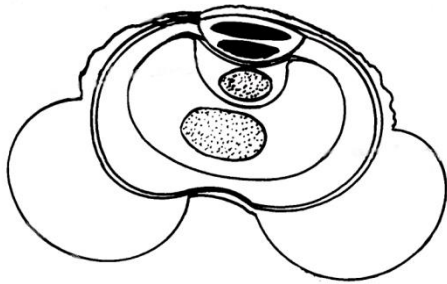


POLLEN GRAIN

MICROGAMETOPHYTE

**2 SPERM CELLS
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PROTHALLIAL CELLS



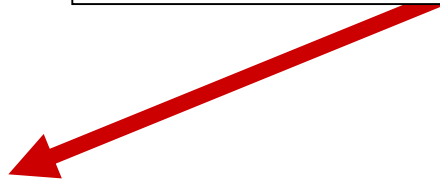
PINUS

TUBE CELL

POLLEN GRAIN

PINUS

MATURE SPOROPHYTE



PINUS

MEGASTROBILI



PINUS



**MEGASTROBILI
UPPER BRANCHES**



MEGASTROBILUS

PINUS

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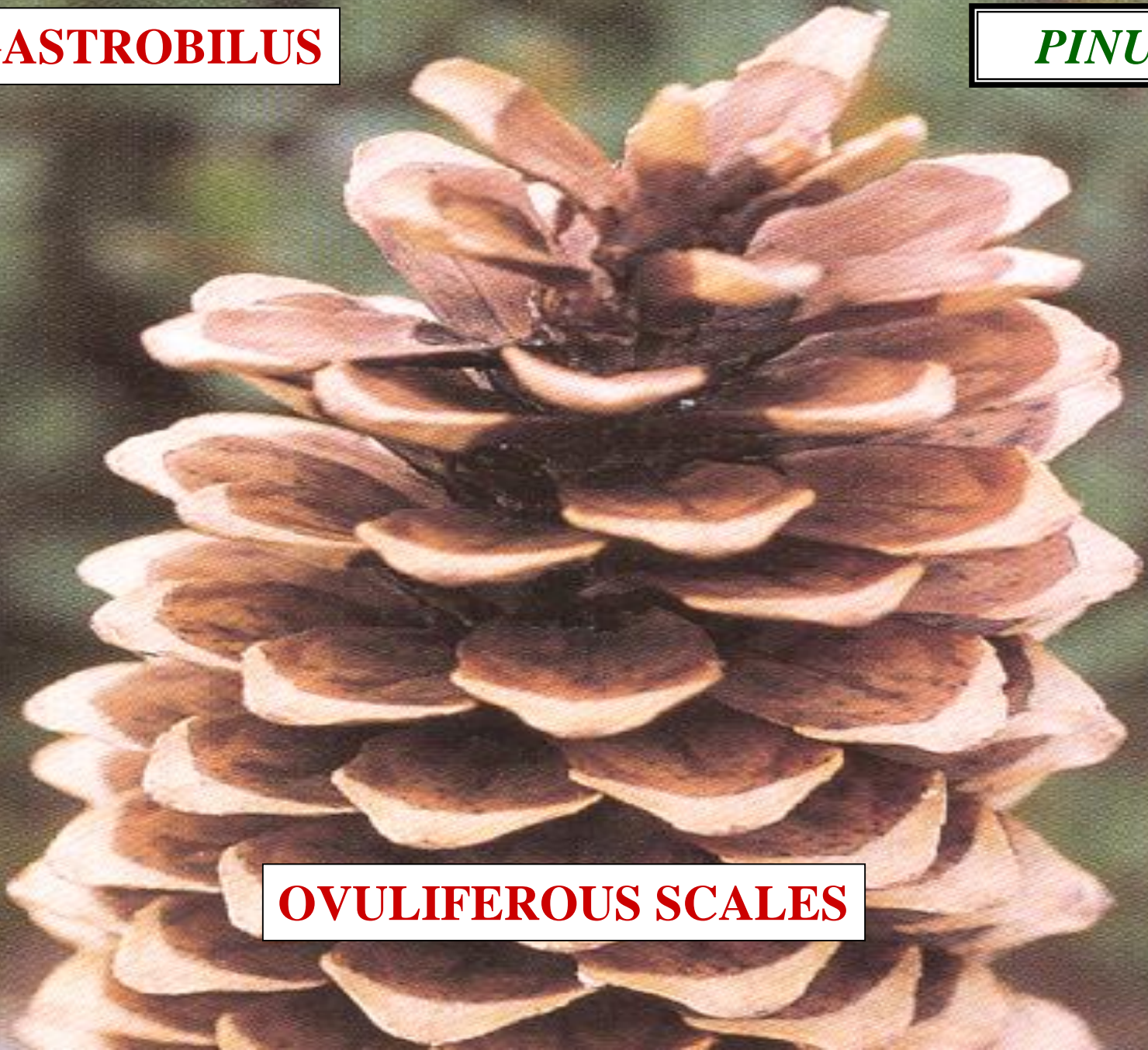
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OVULIFEROUS SCALES

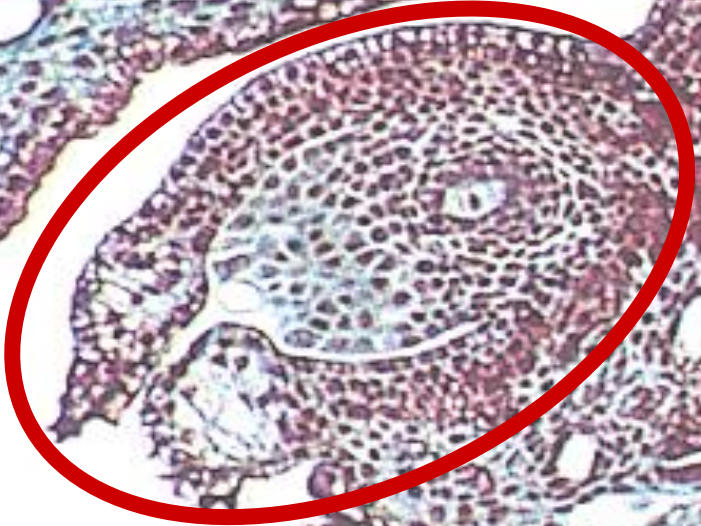


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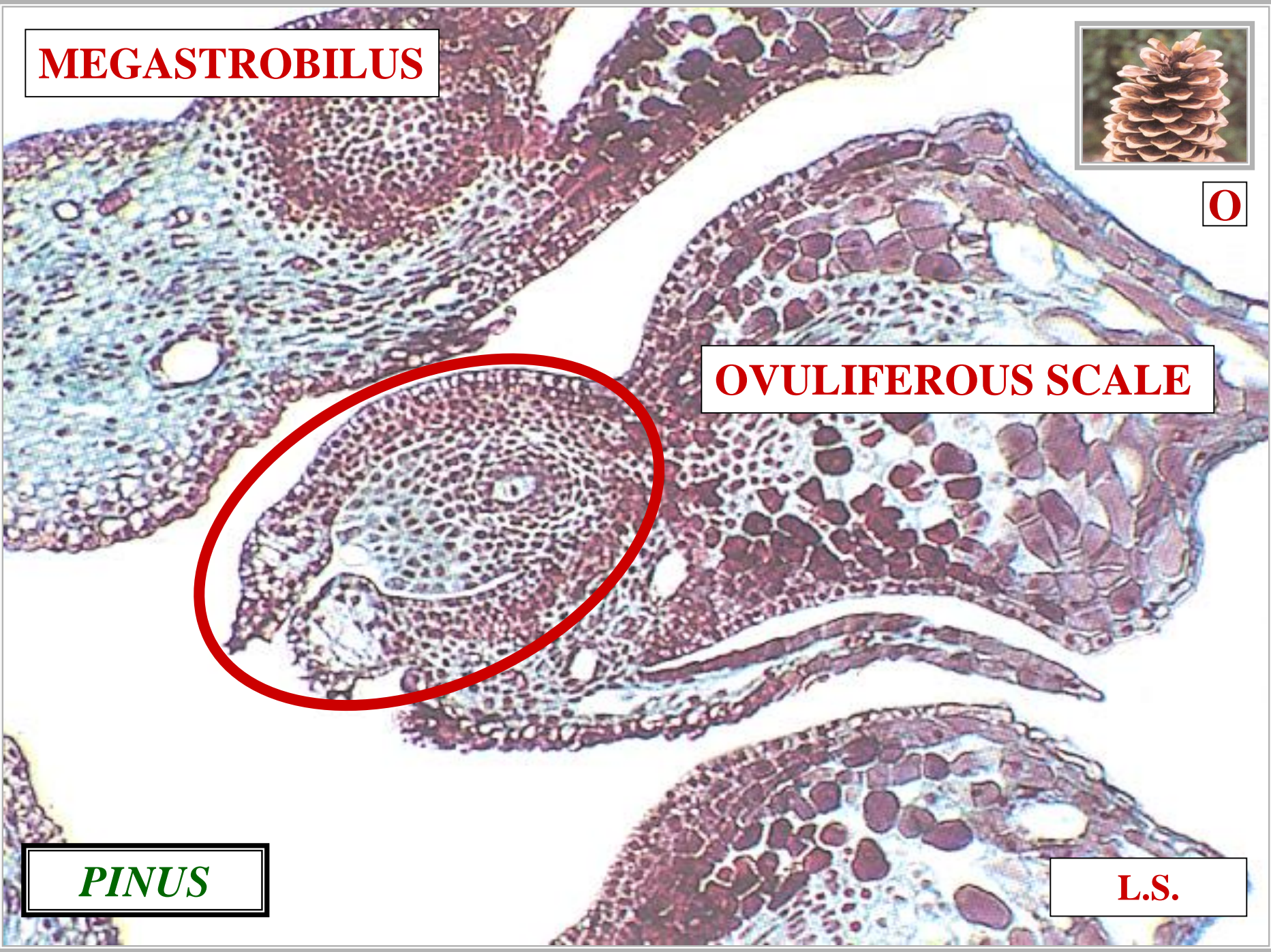
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OVULIFEROUS SCALE



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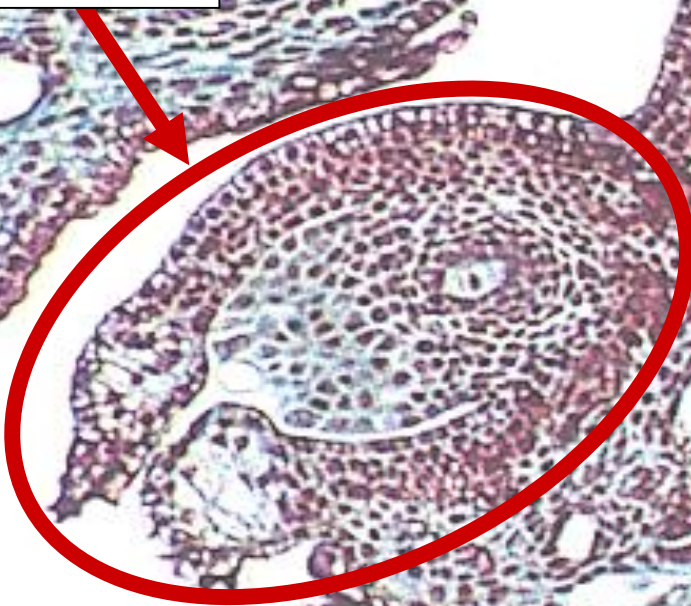
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MEGASTROBILUS



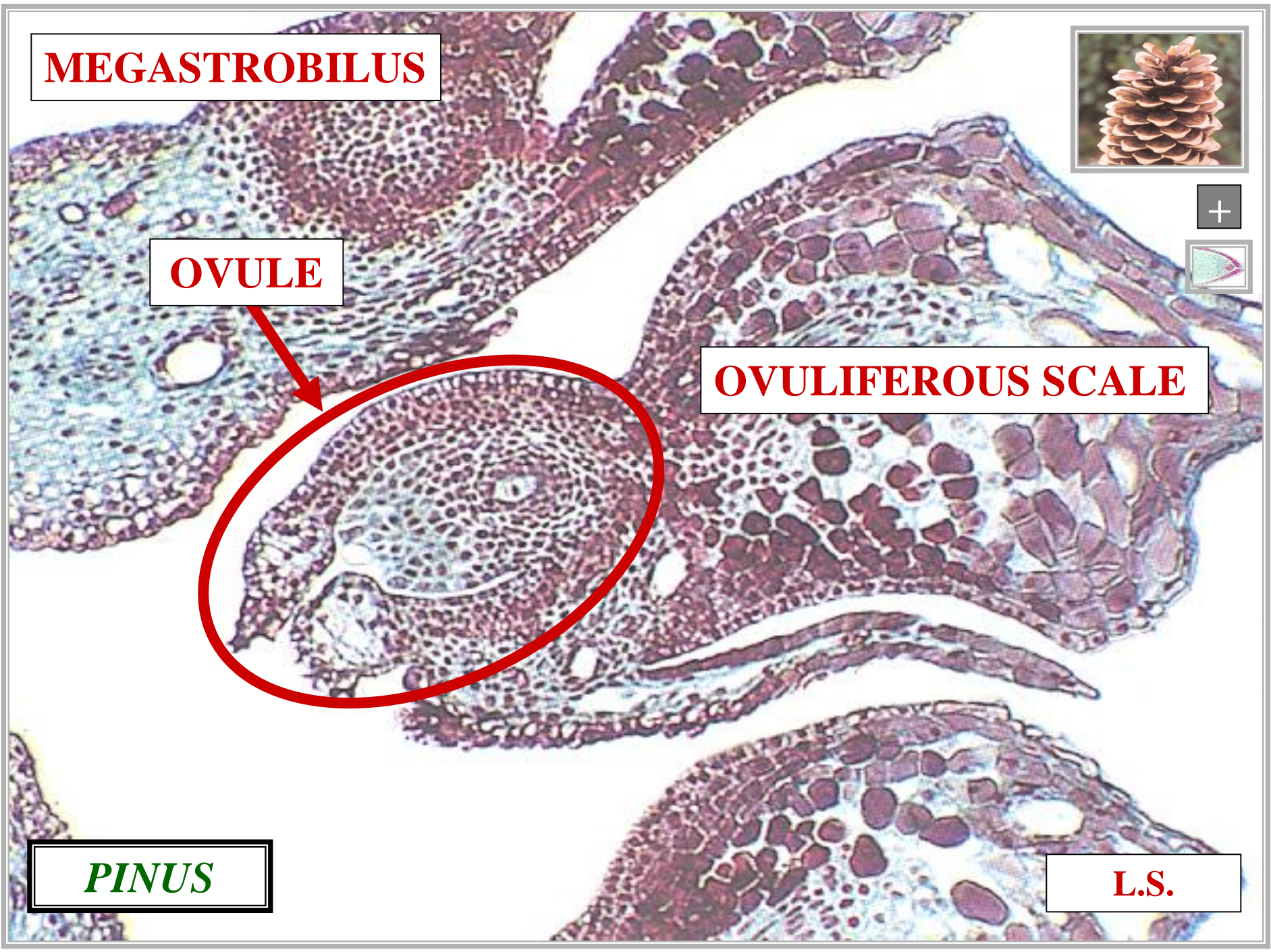
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OVULIFEROUS SCALE

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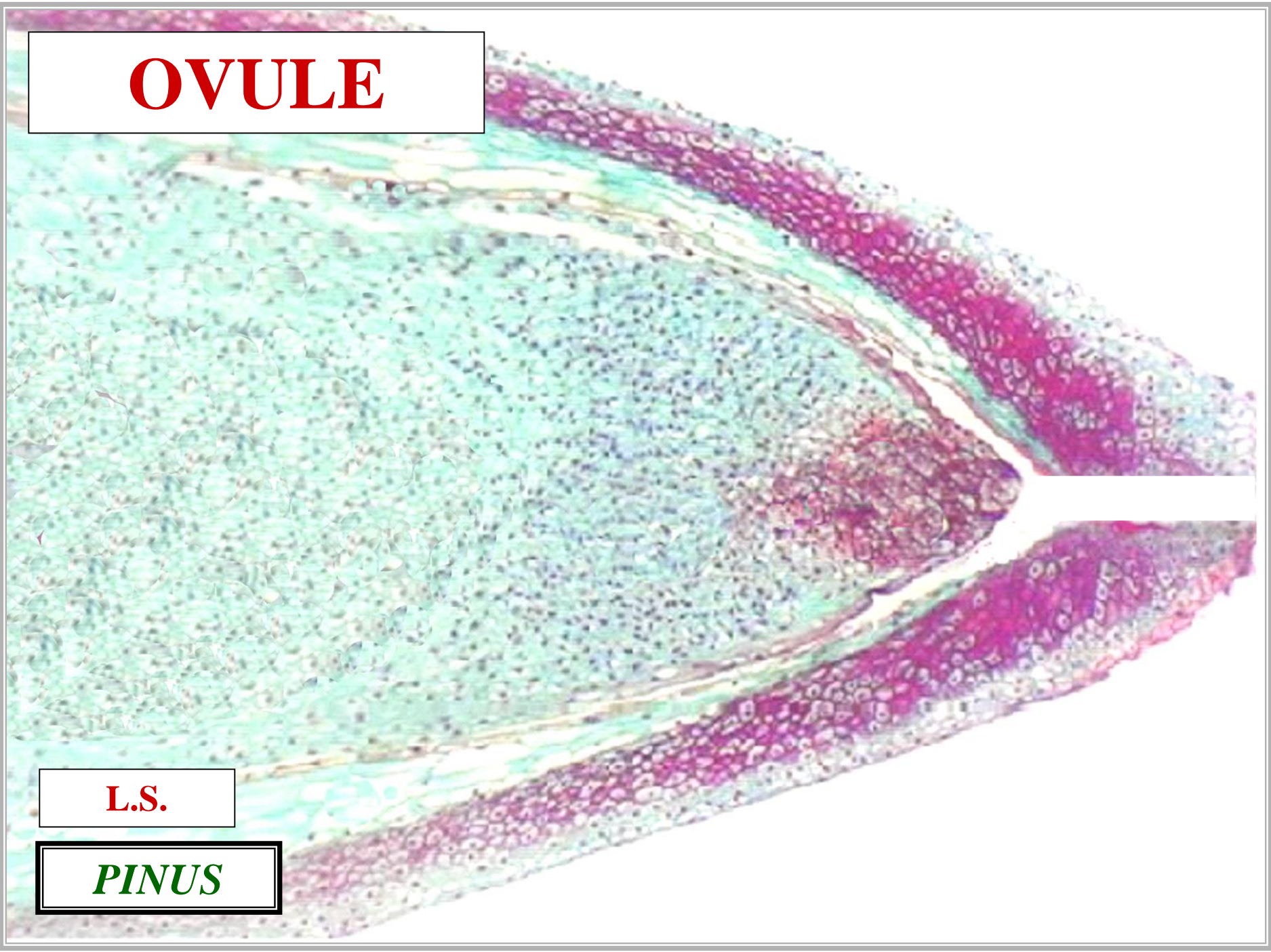
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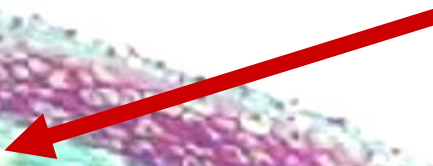
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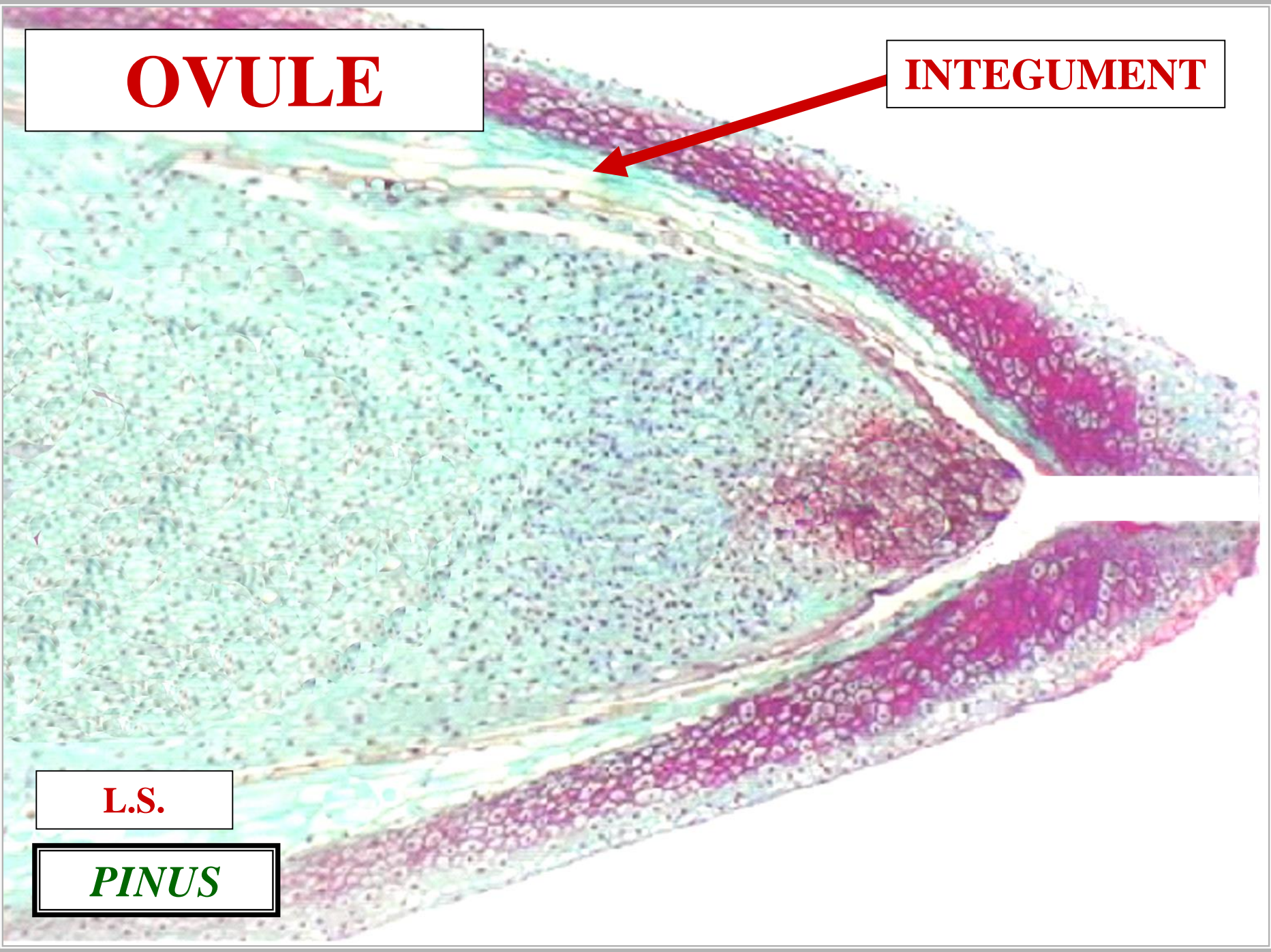
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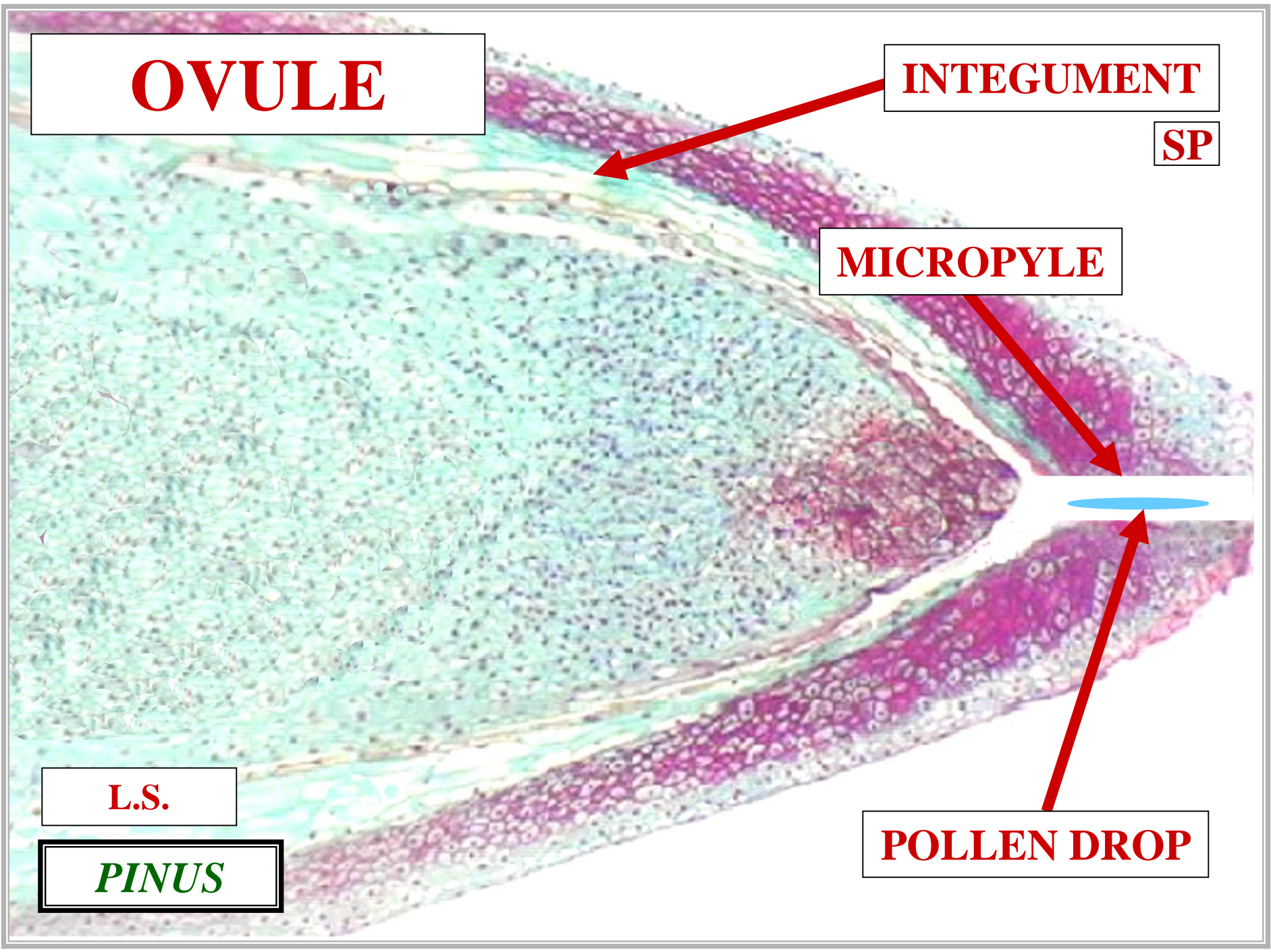
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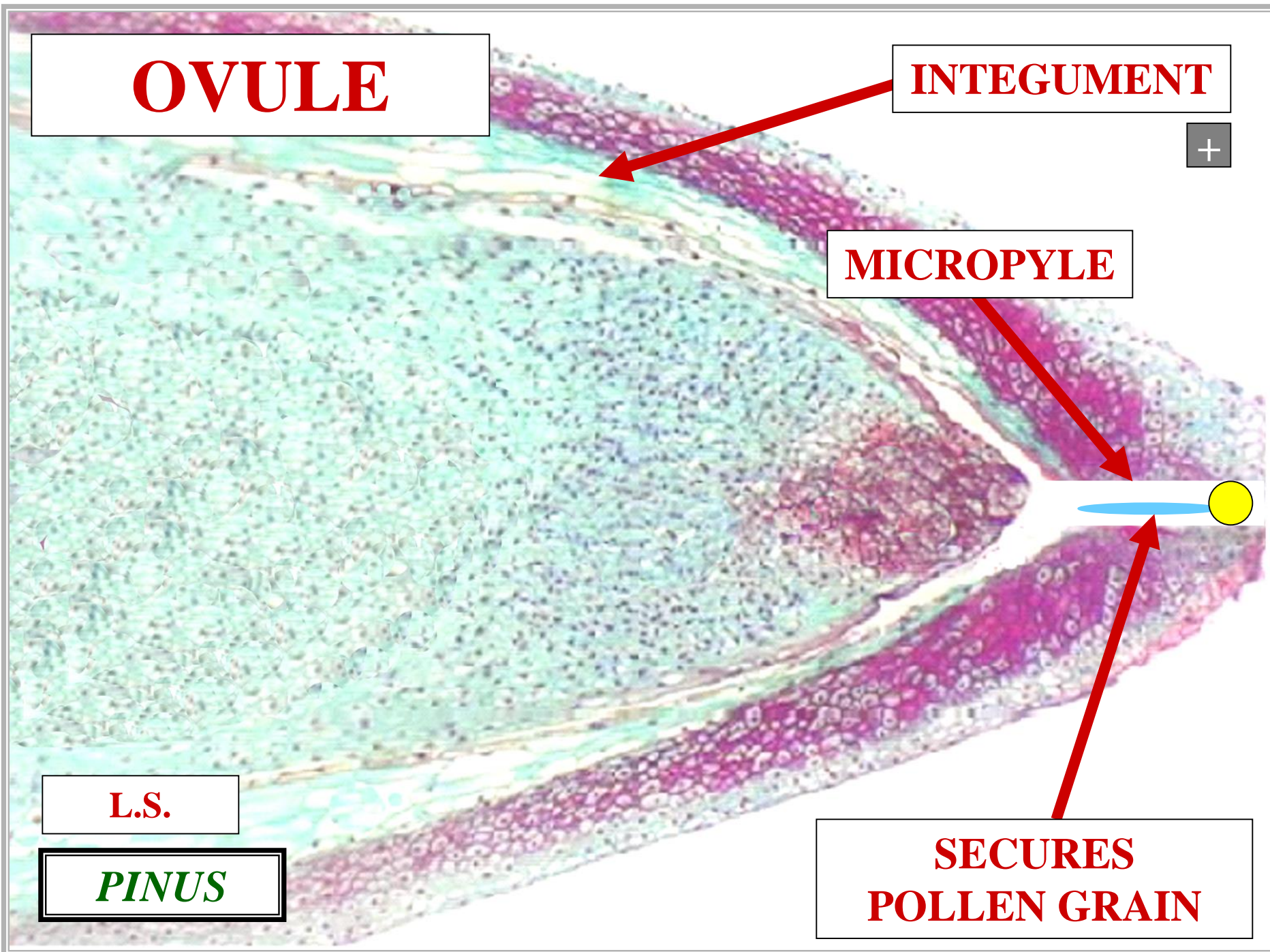


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**SECURES
POLLEN GRAIN**



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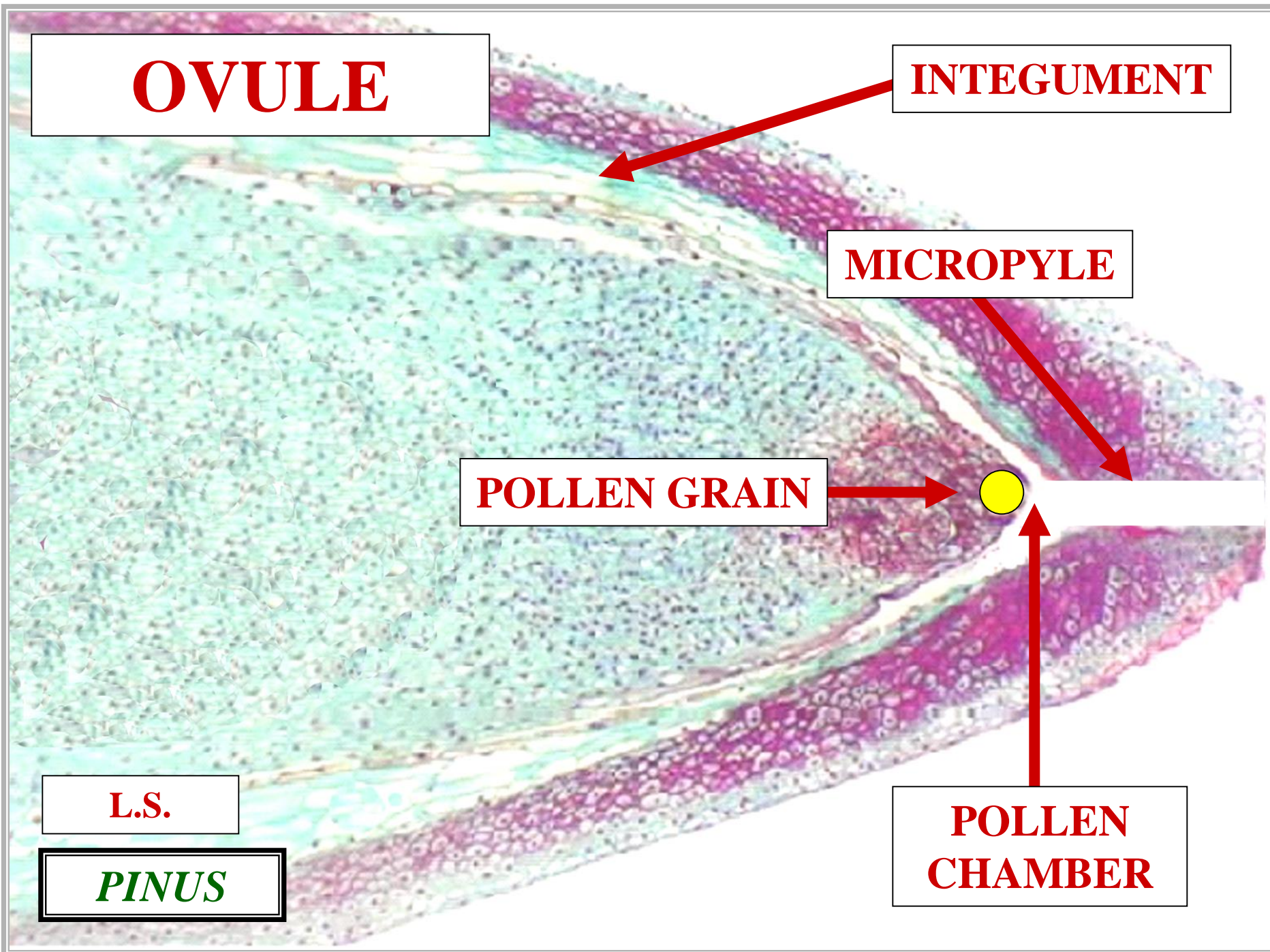
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**POLLEN
CHAMBER**



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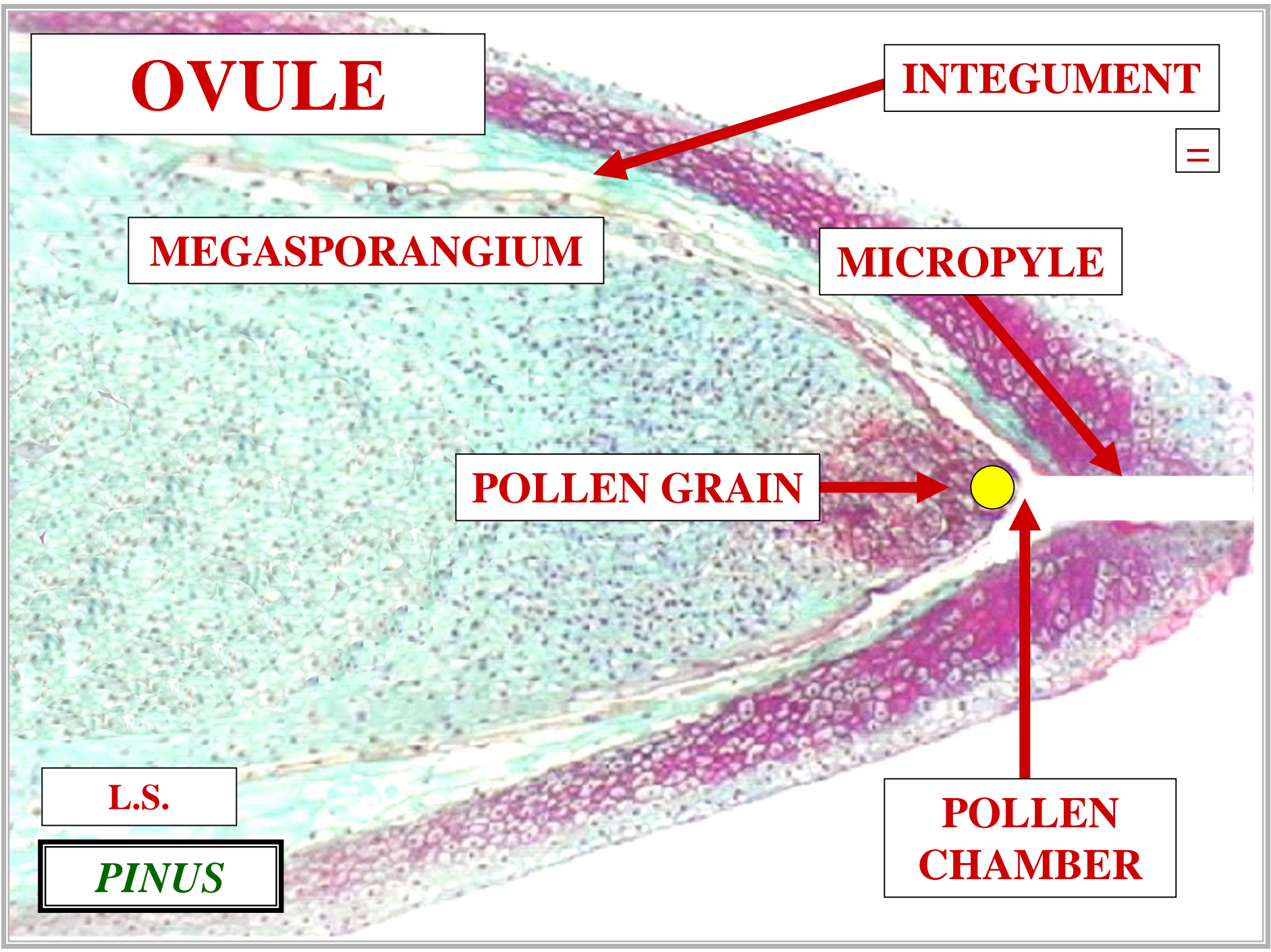
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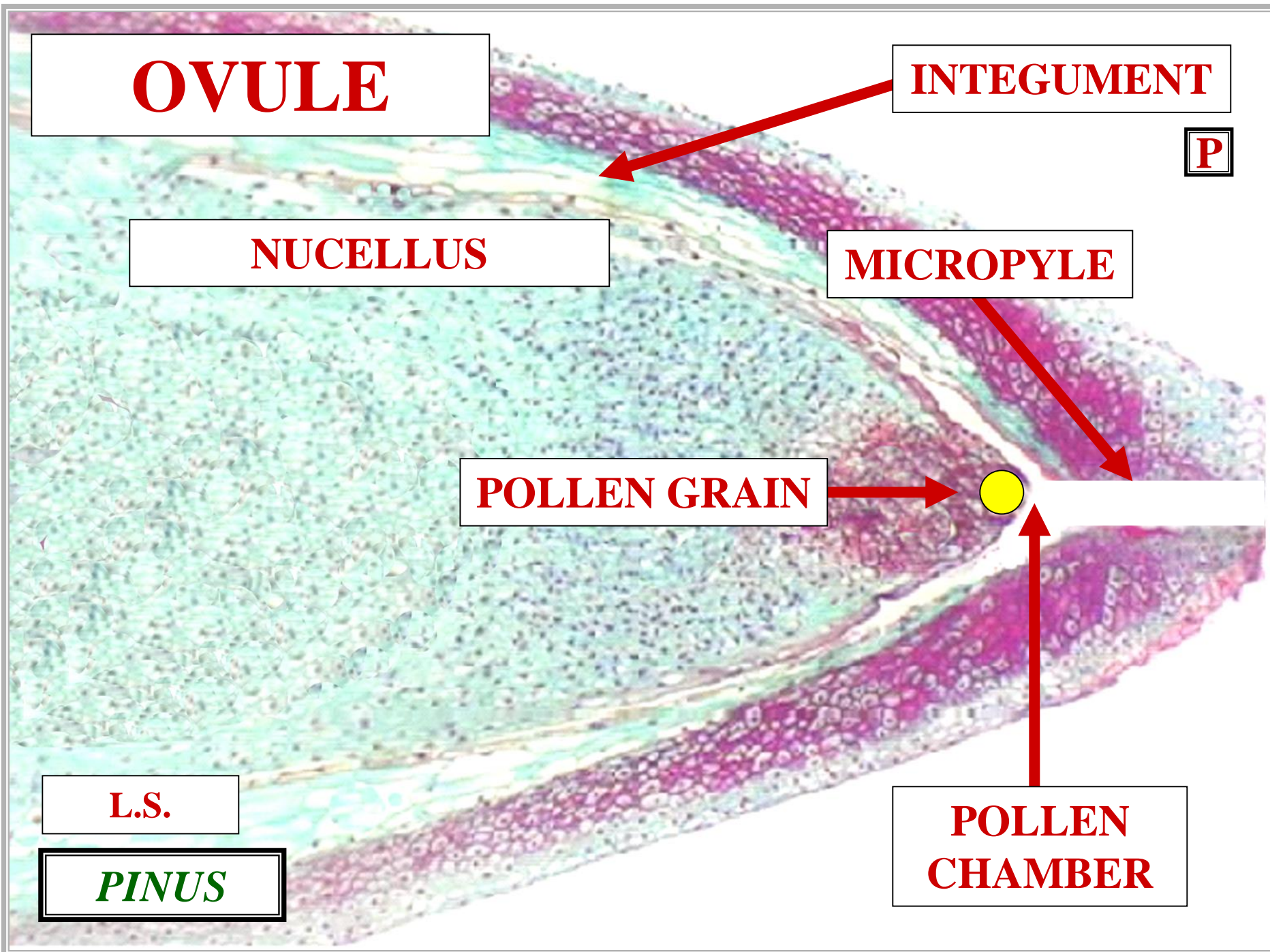
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MICROPYLE

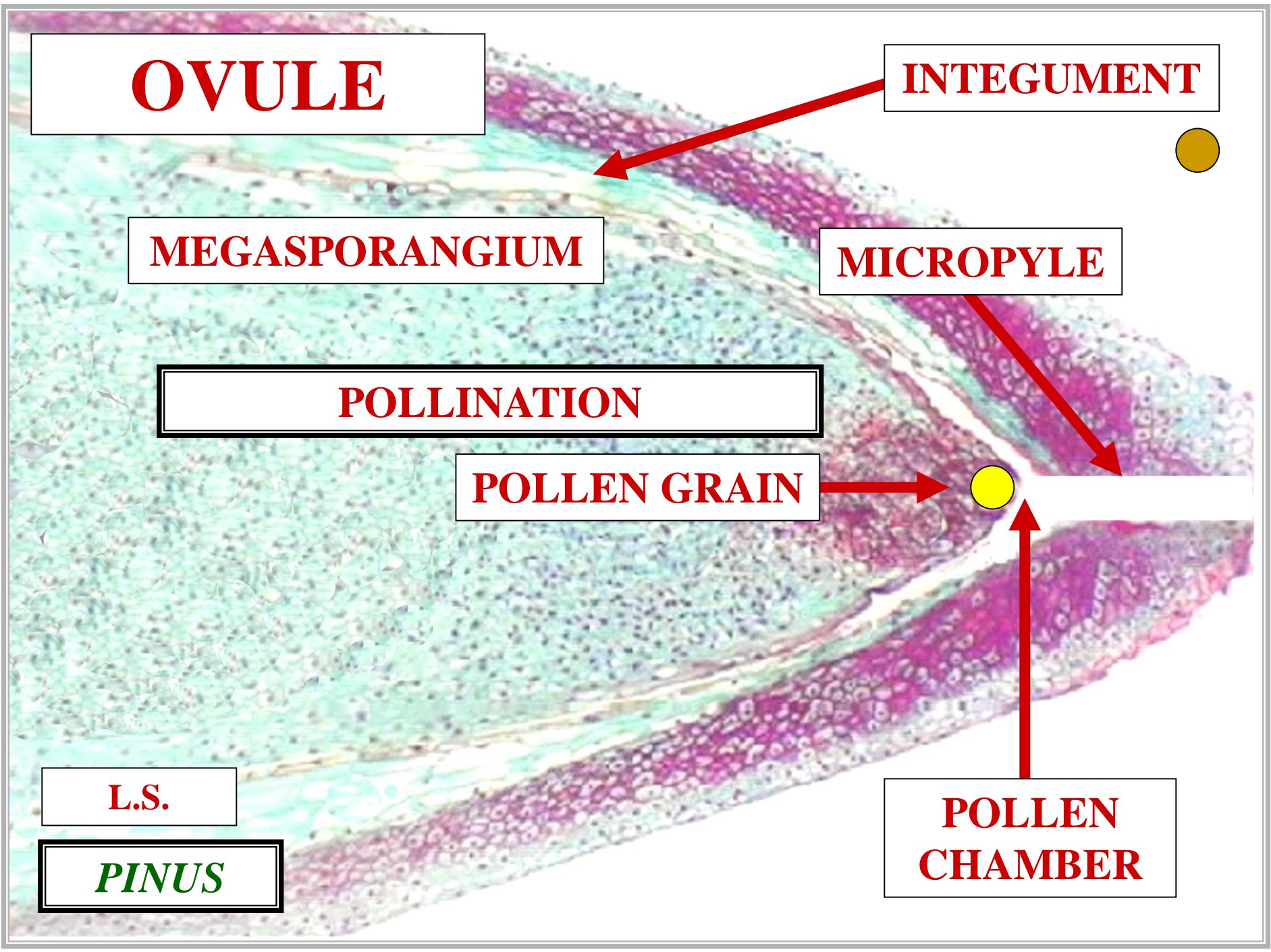
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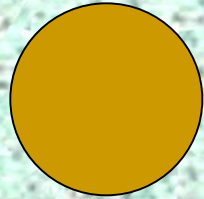


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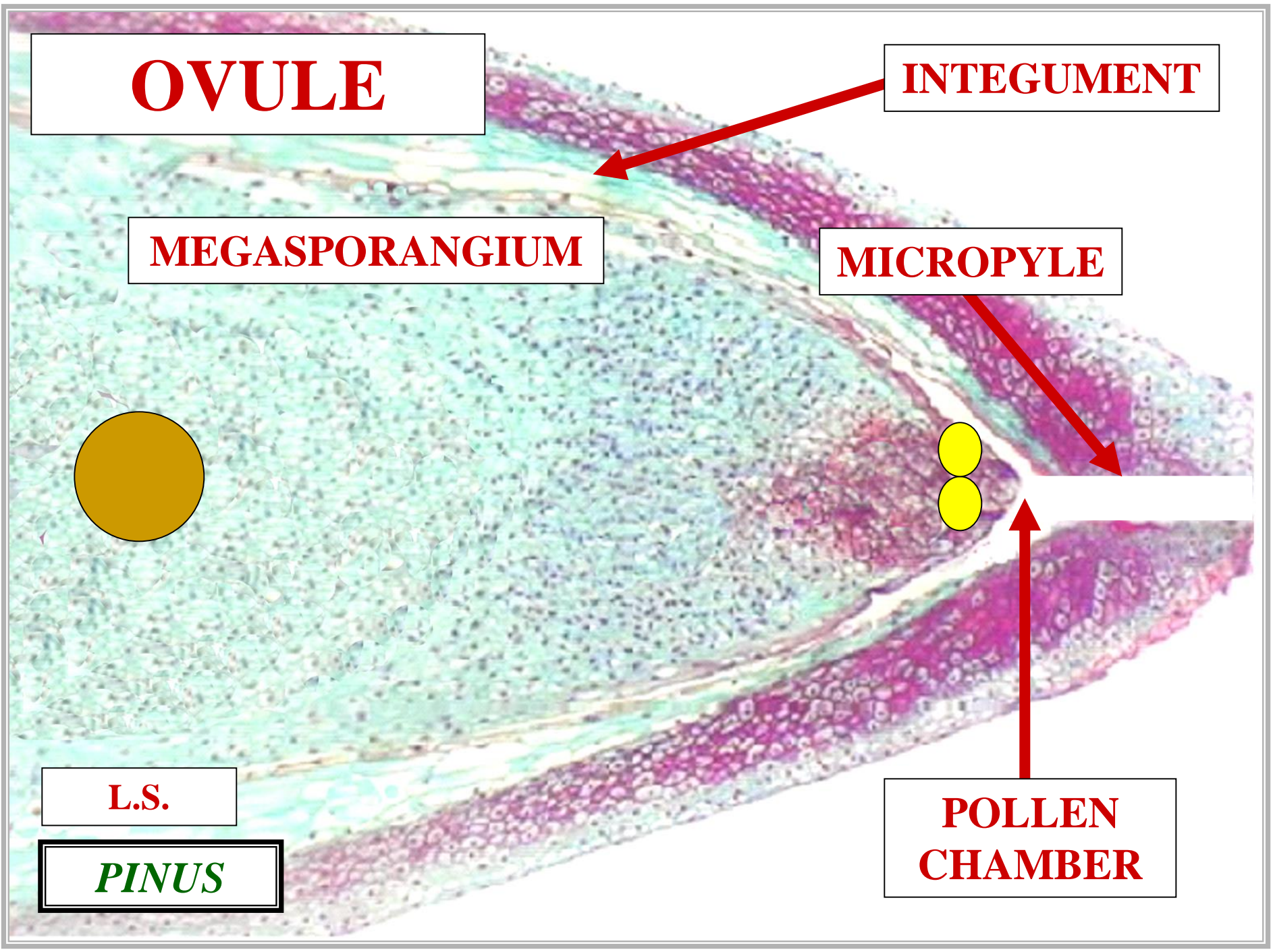
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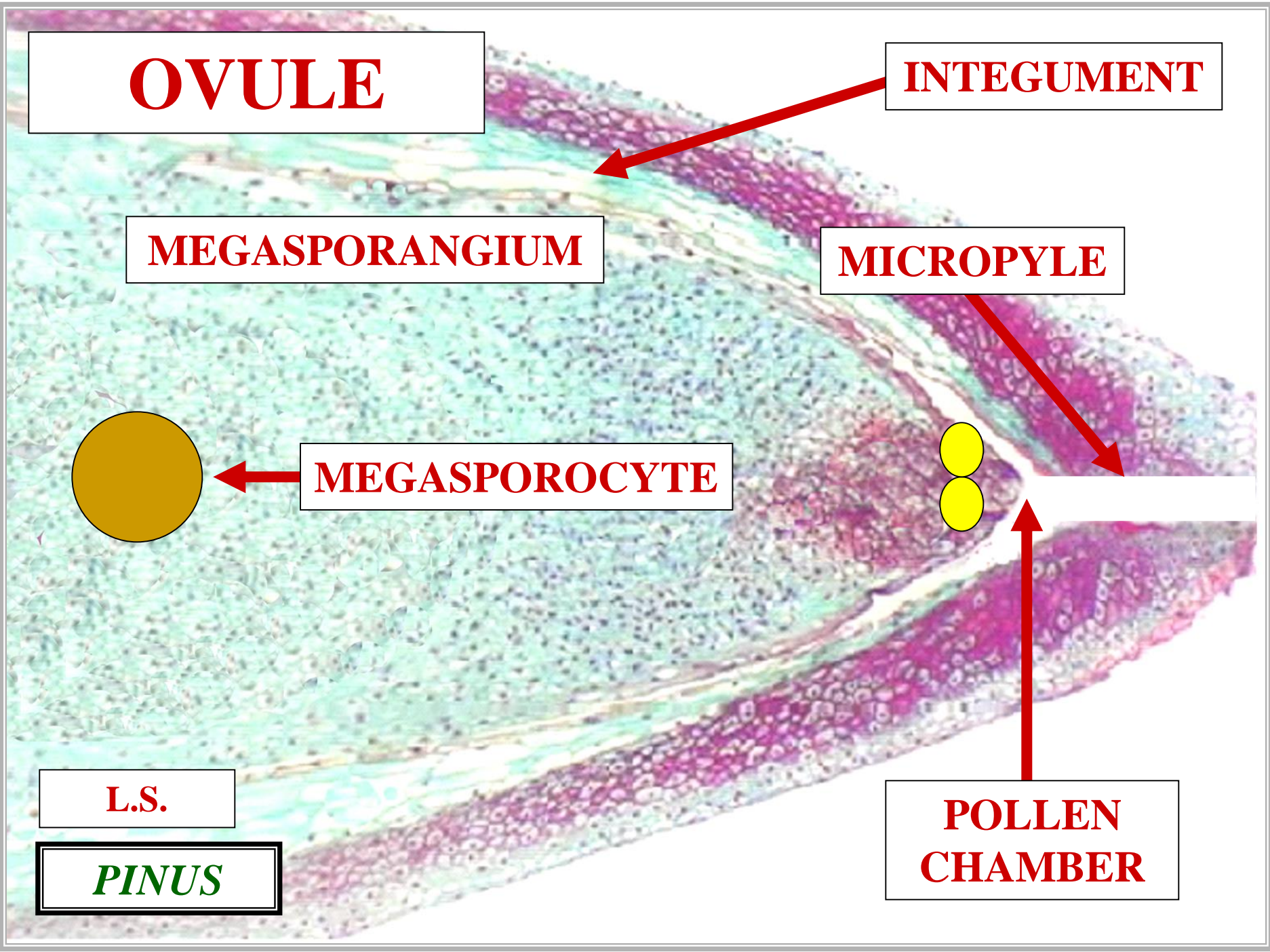
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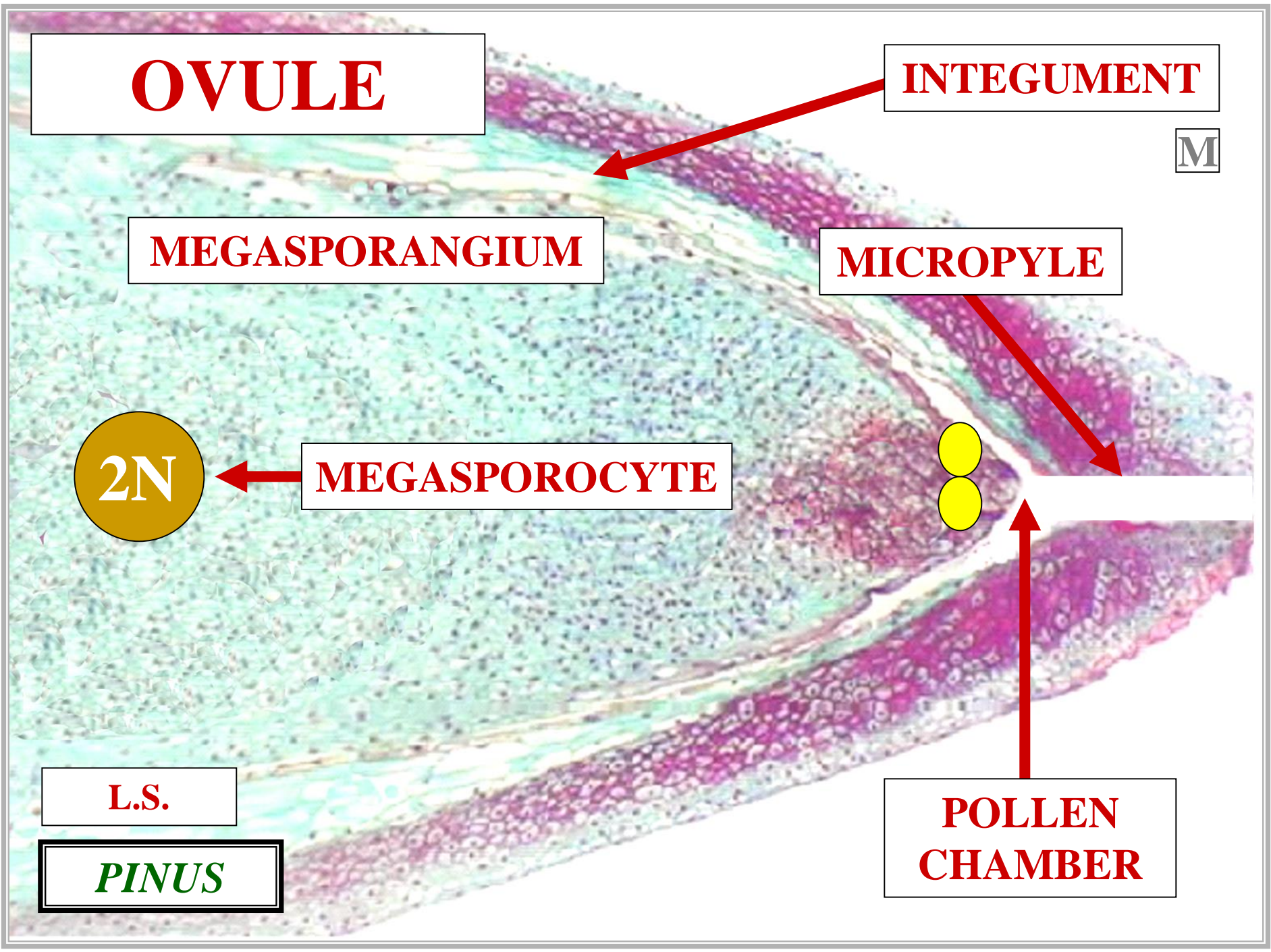
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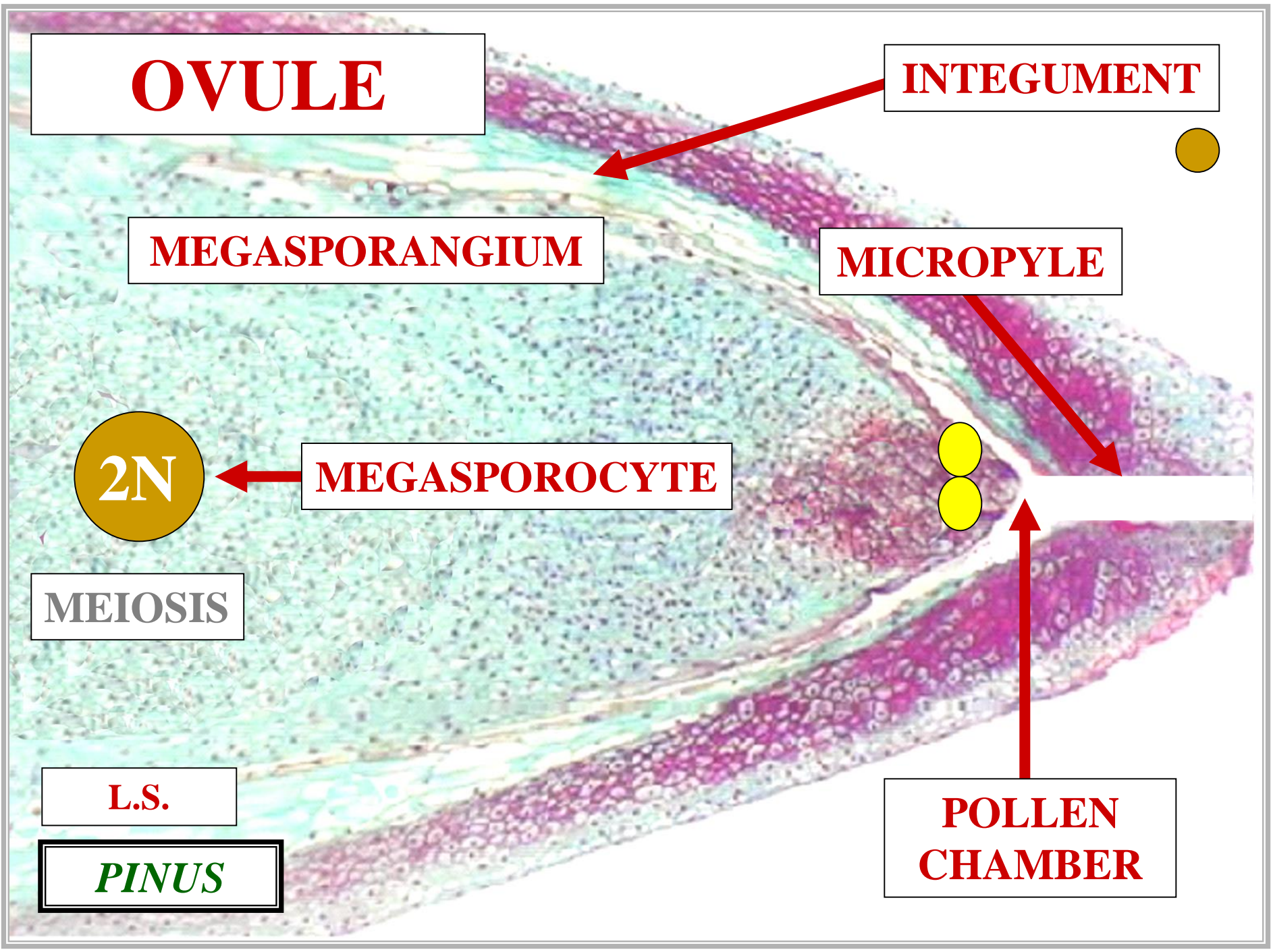
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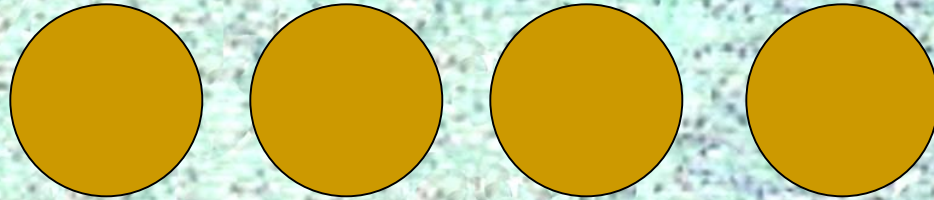


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CHAMBER**

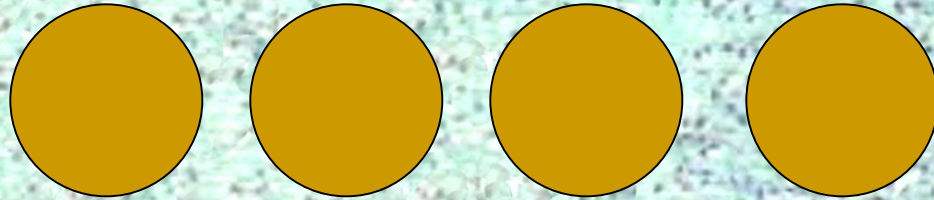
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MICROPYLE



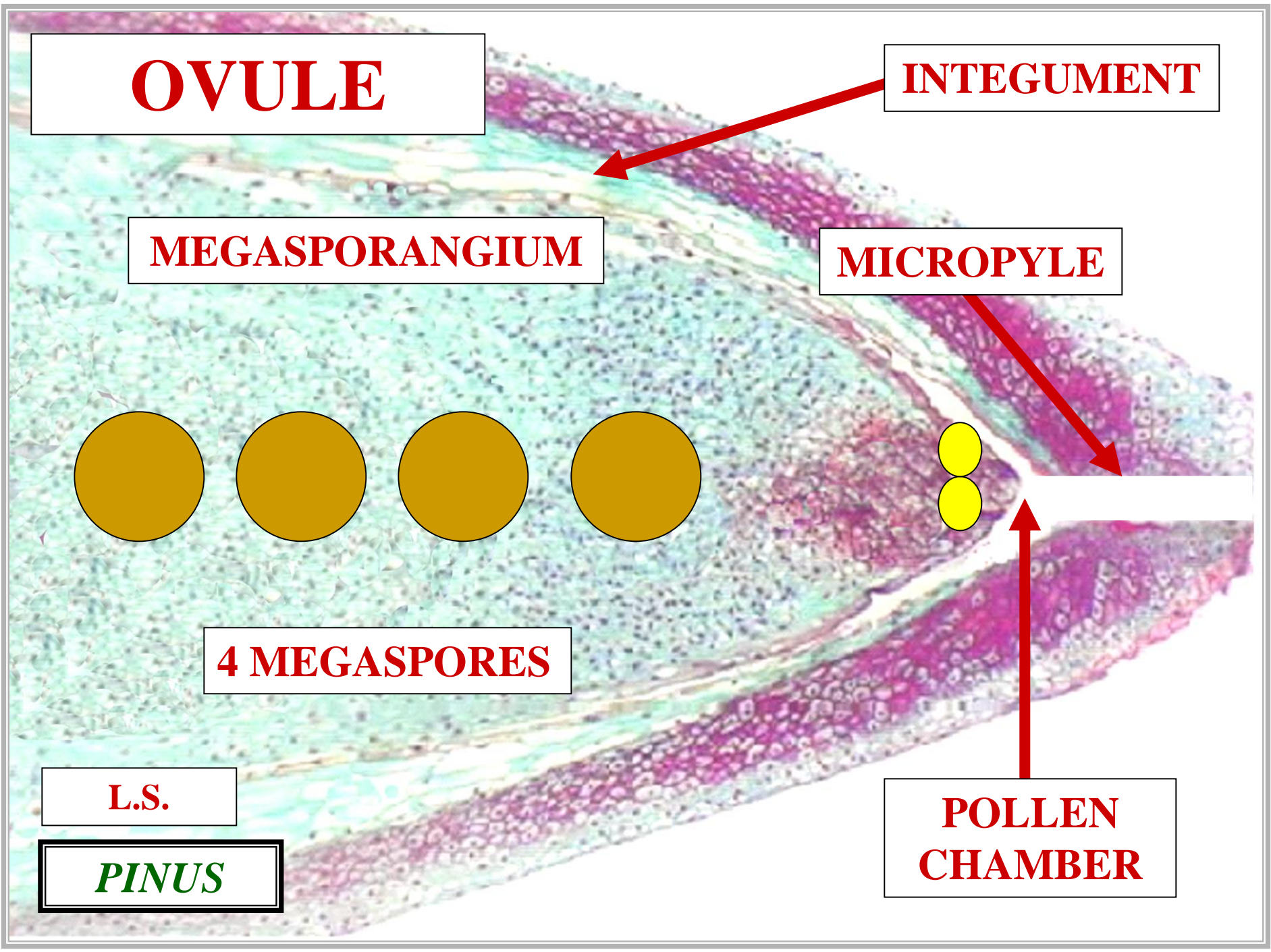
4 MEGASPORES



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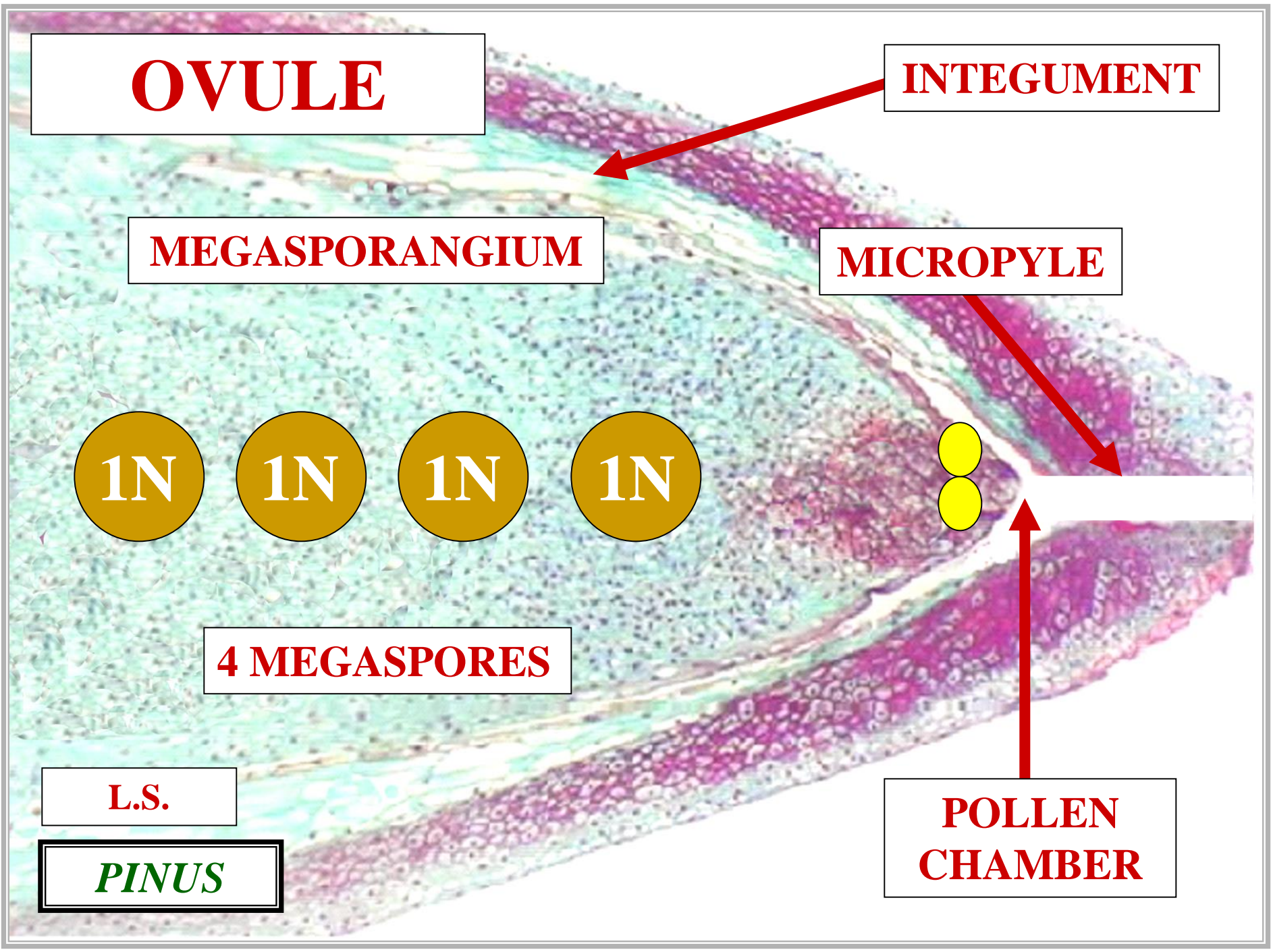
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4 MEGASPORES

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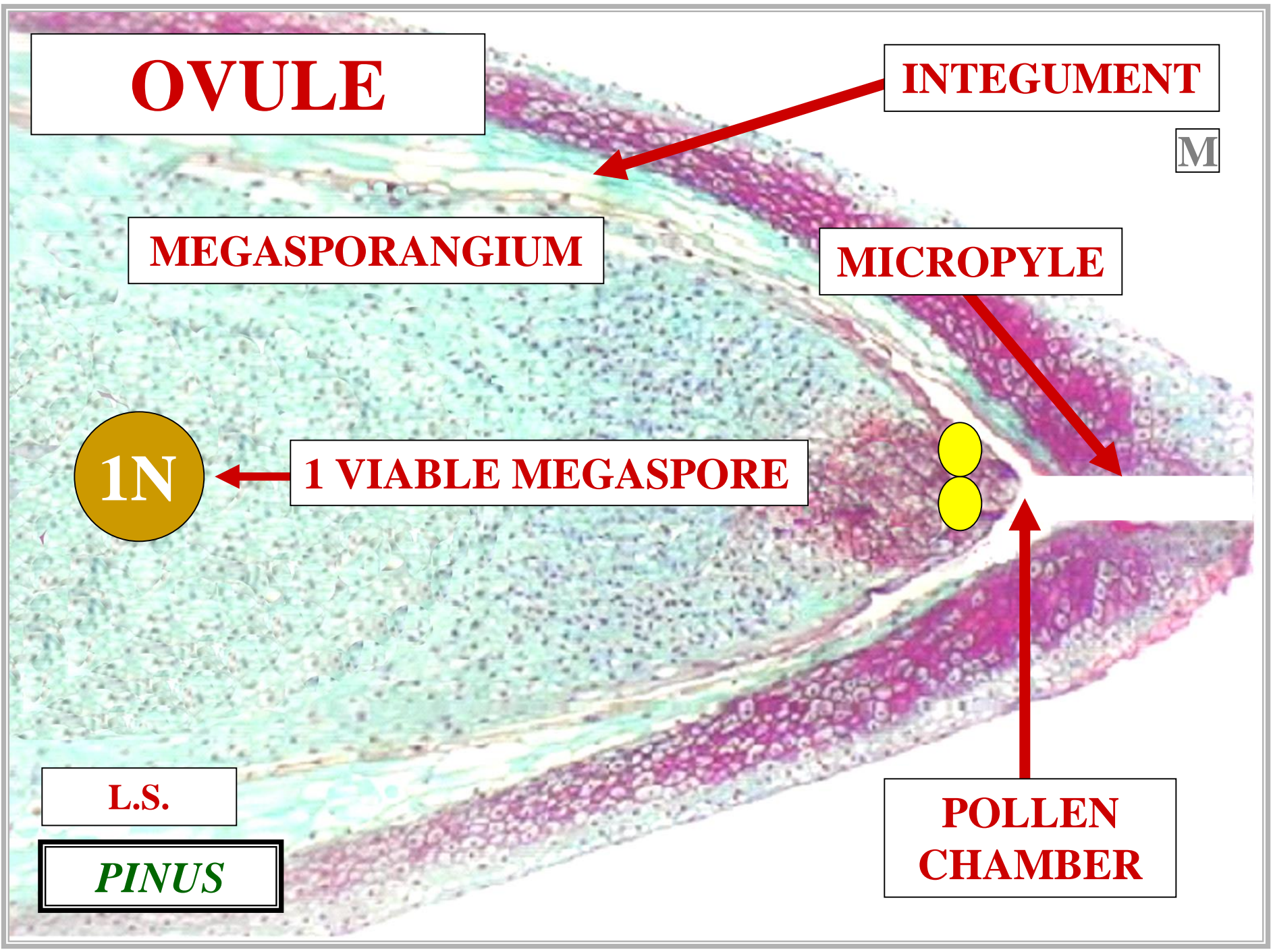
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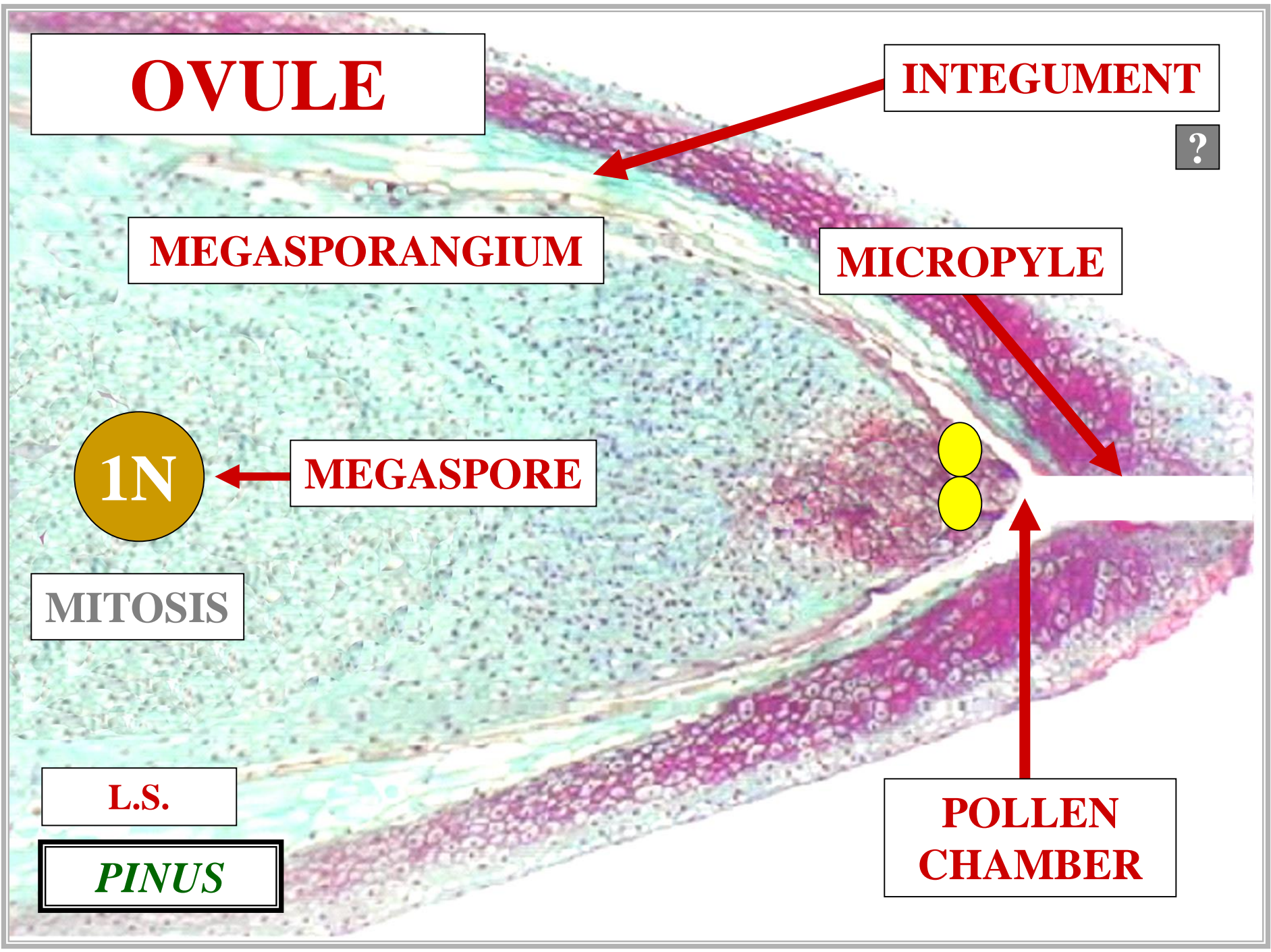
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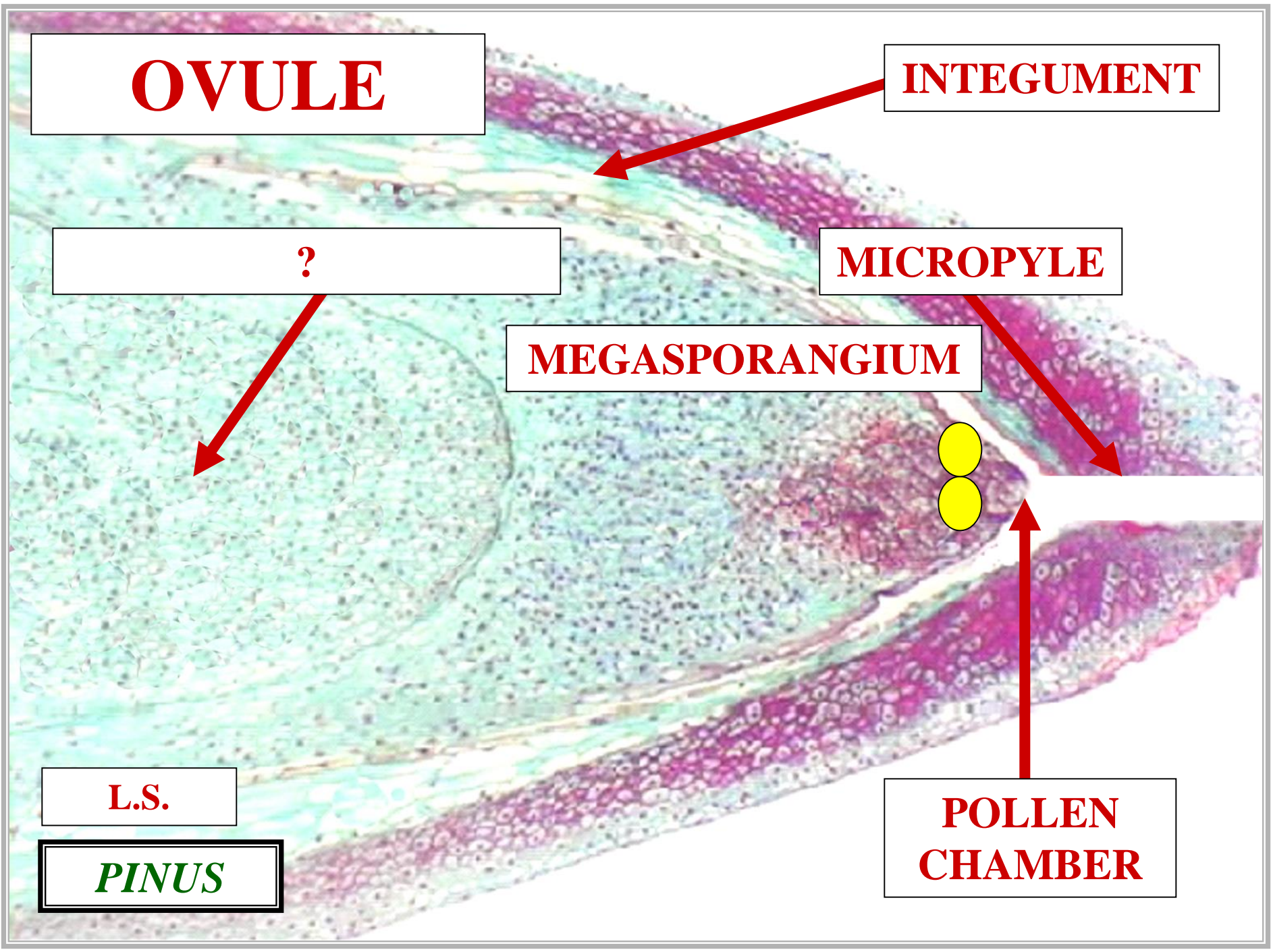
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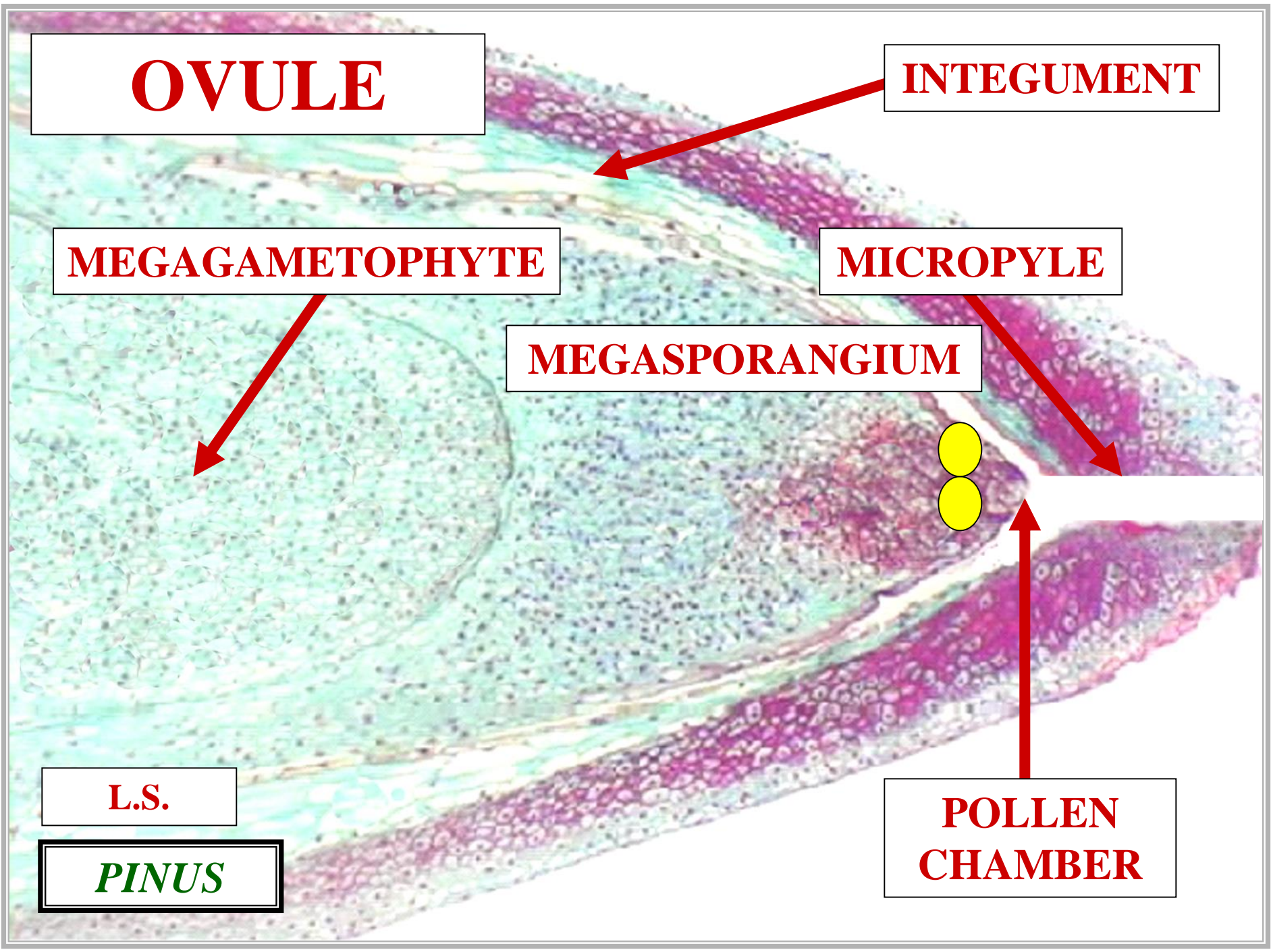
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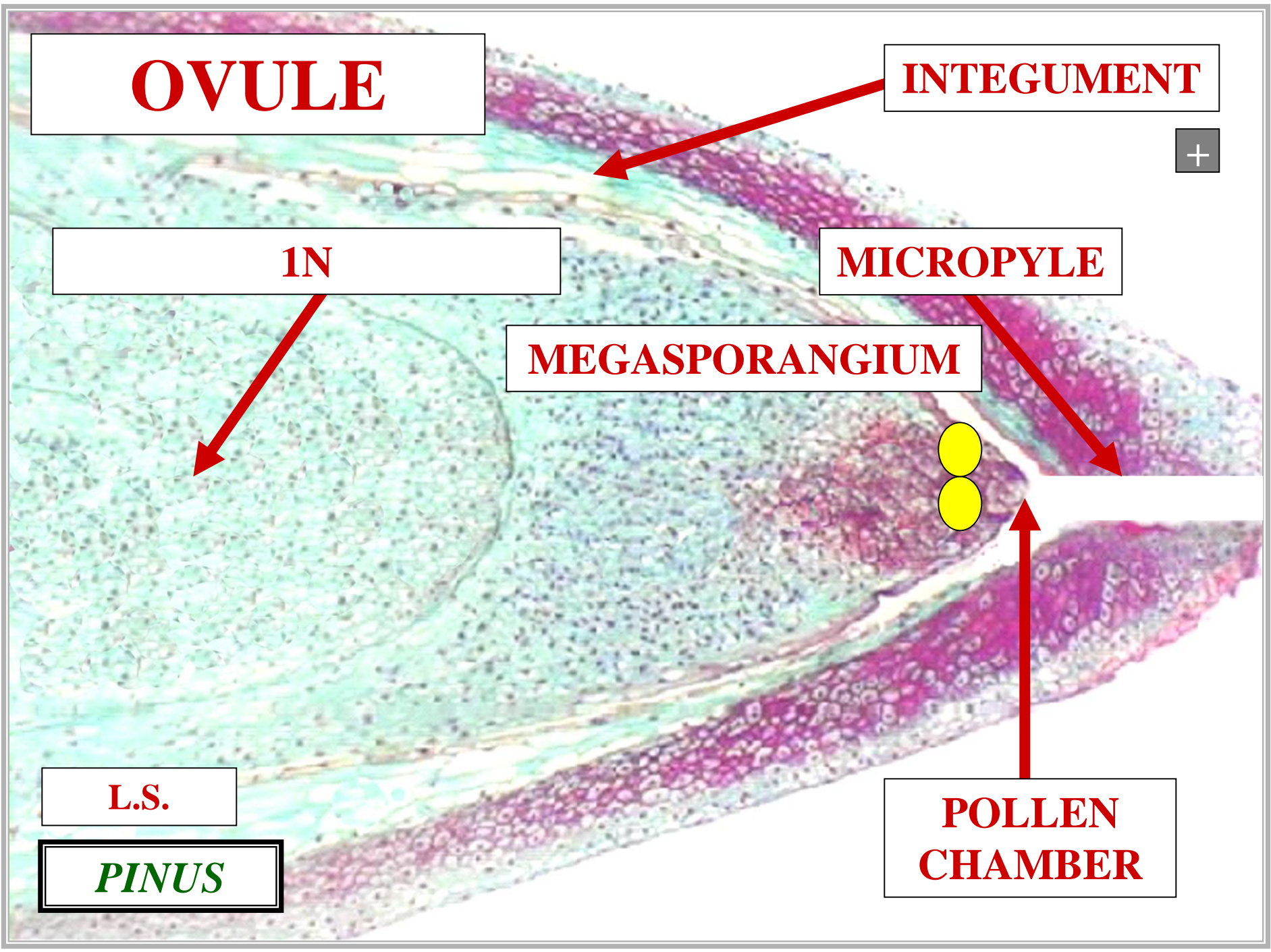
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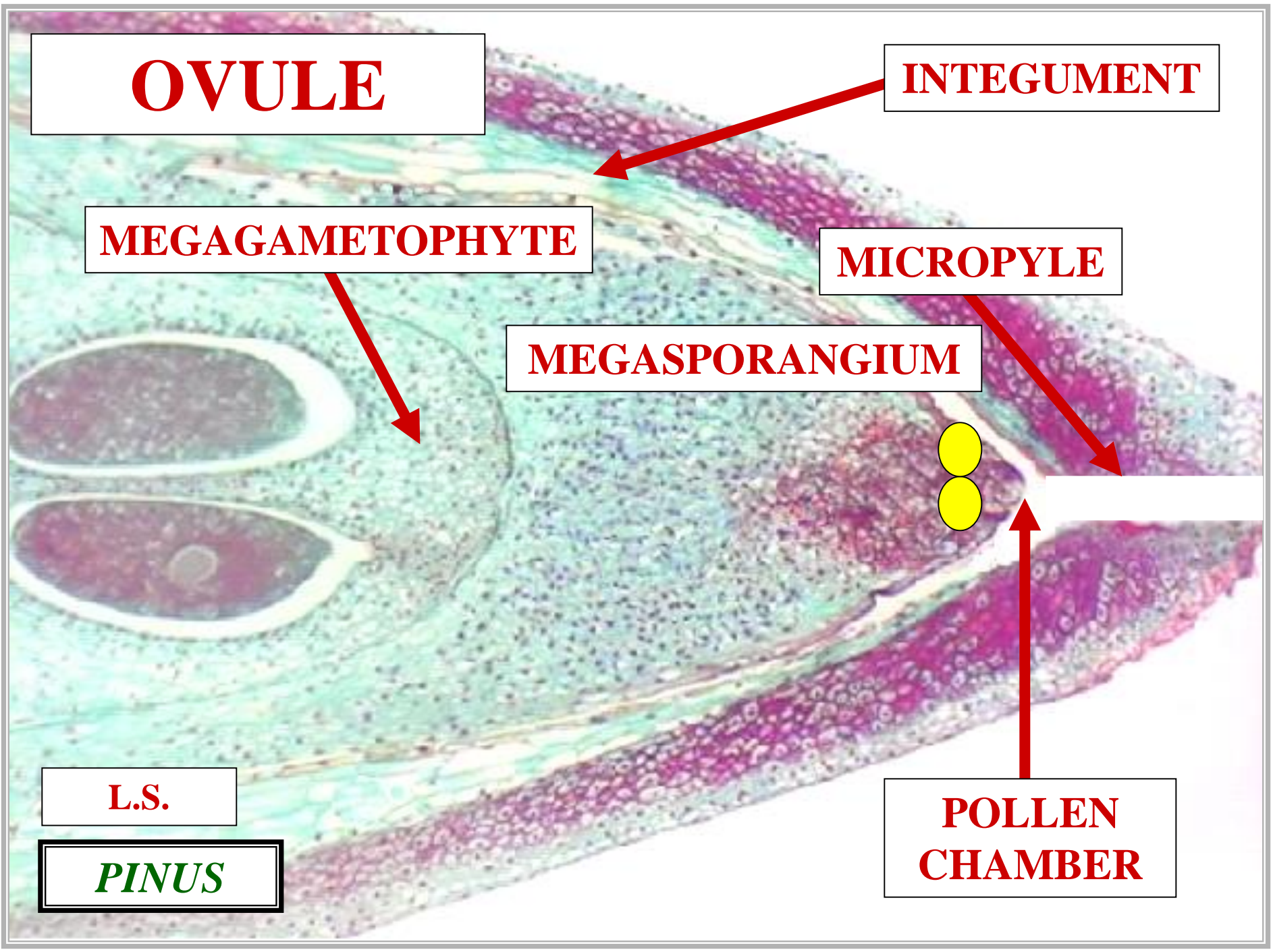
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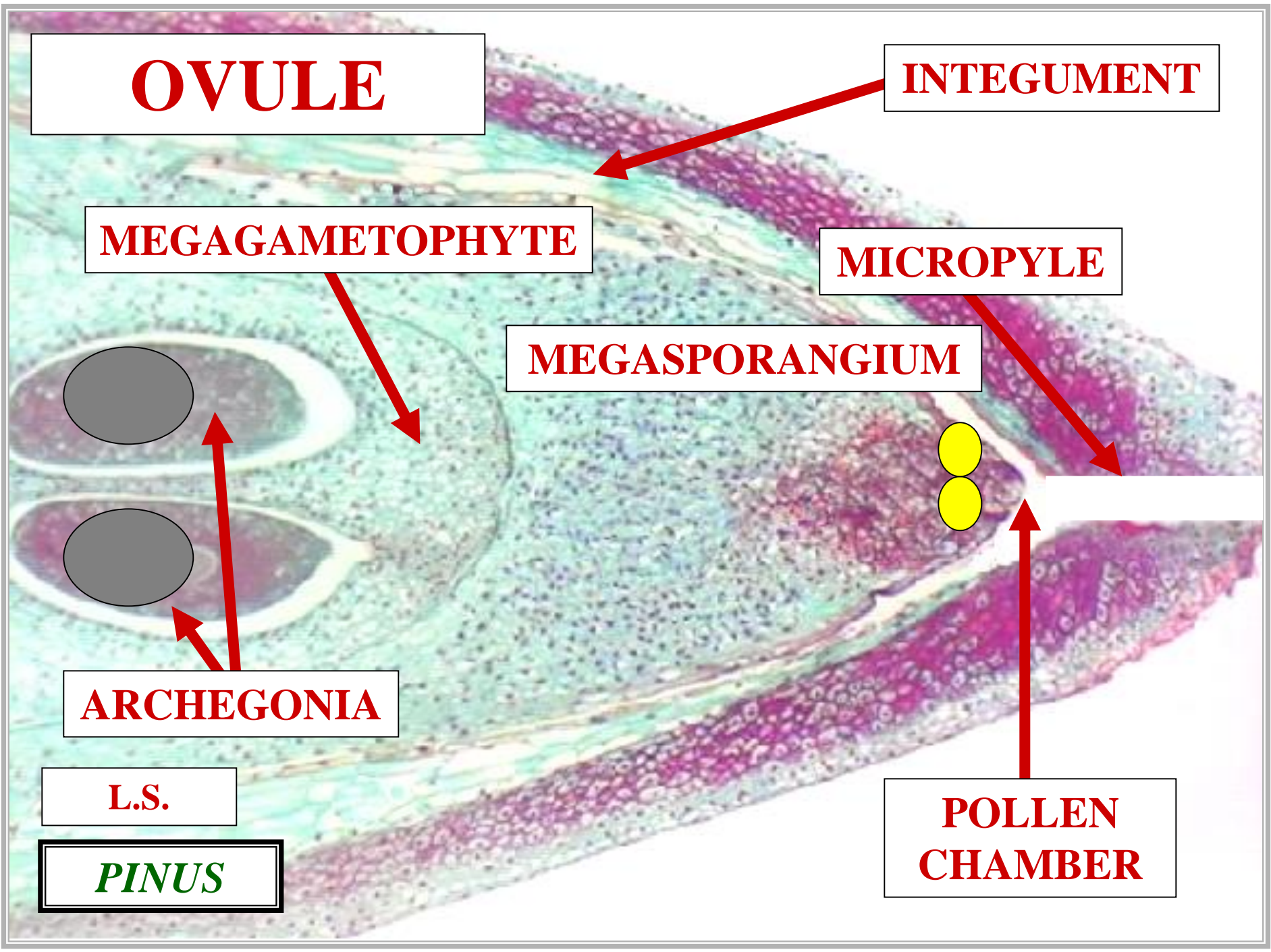
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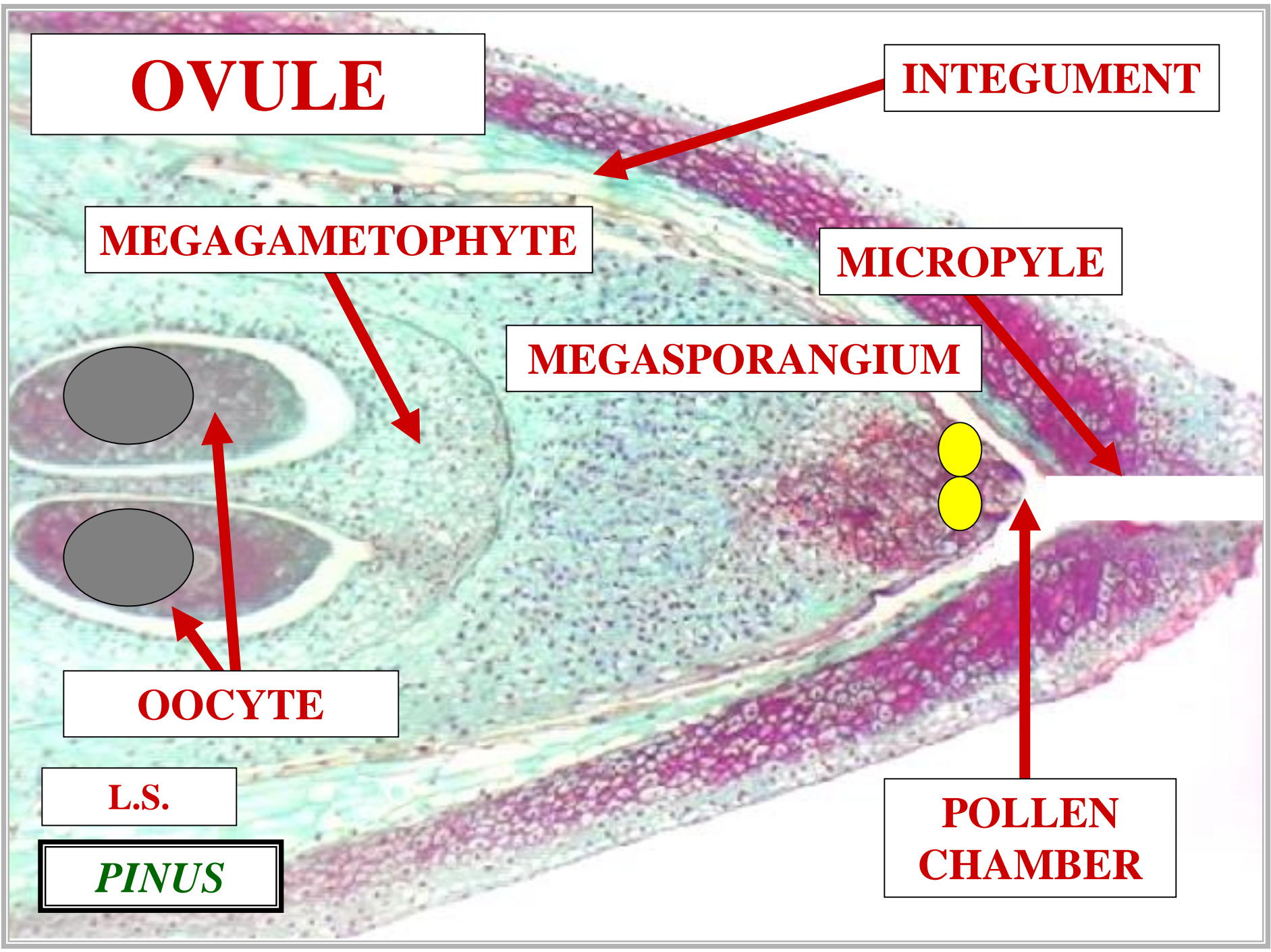
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OOCYTE

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CHAMBER**



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MEGAGAMETOPHYTE

MICROPYLE

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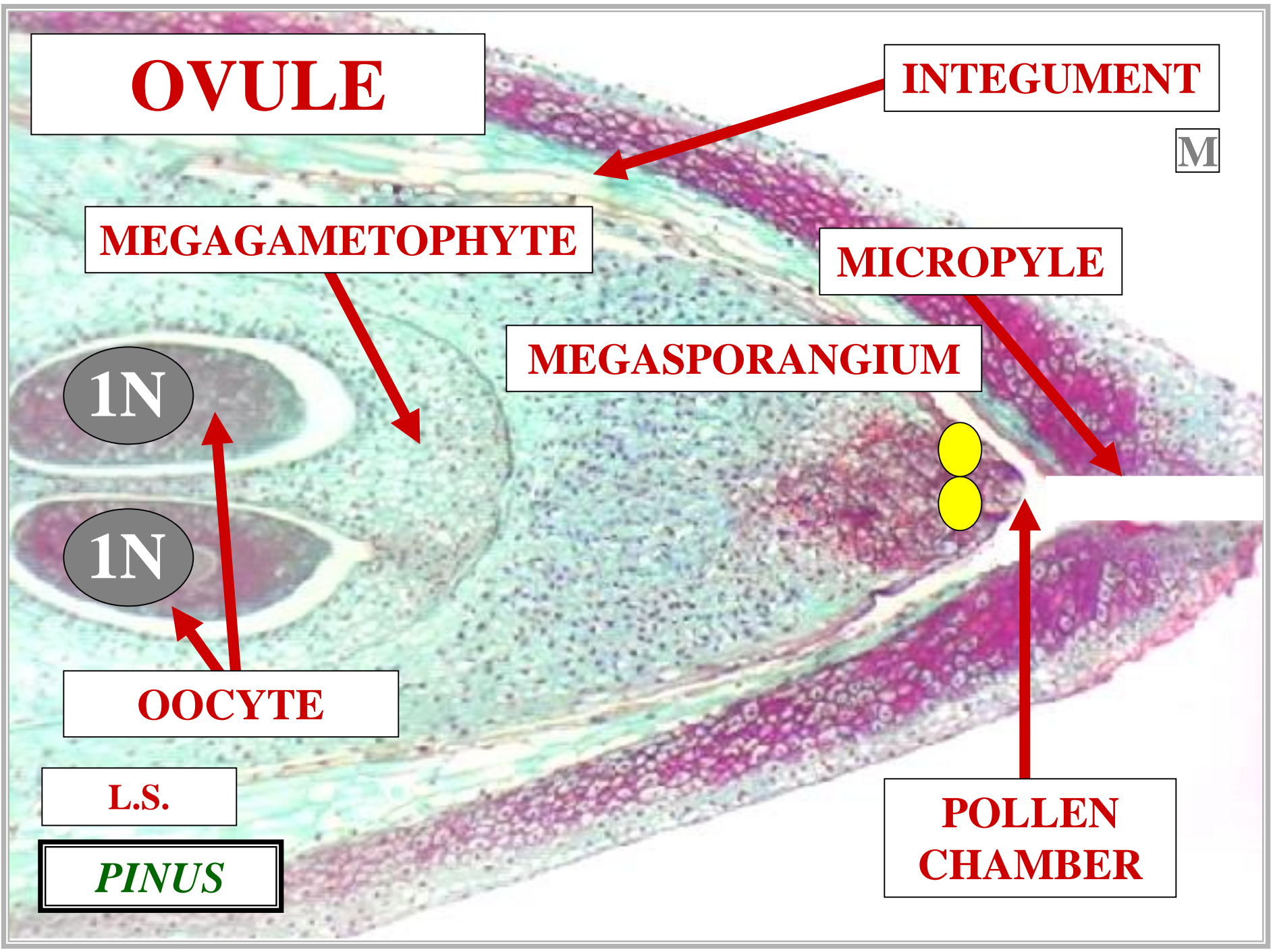
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L.S.

PINUS

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CHAMBER**



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MEGAGAMETOPHYTE

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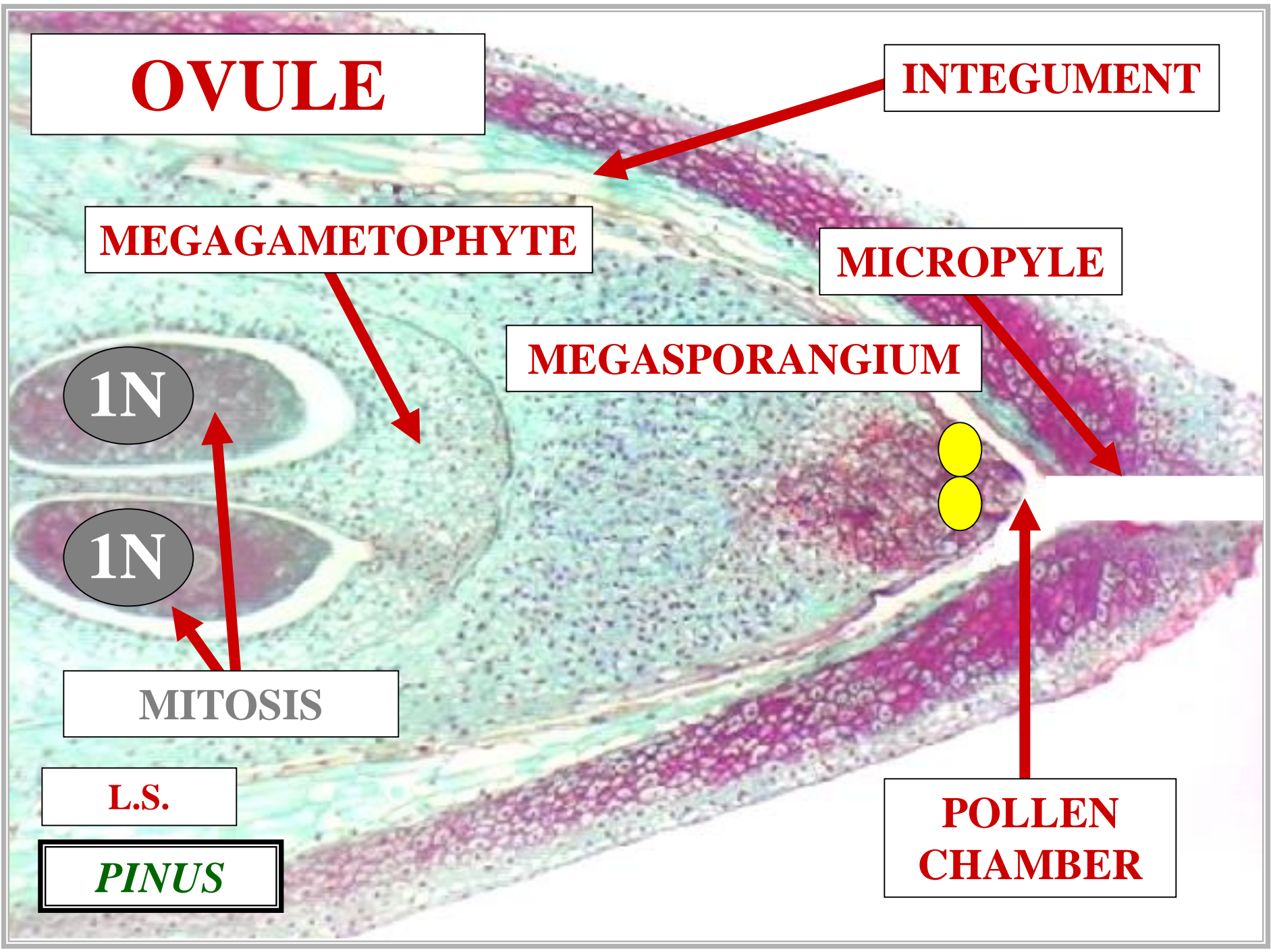
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CHAMBER**



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MEGAGAMETOPHYTE

MICROPYLE

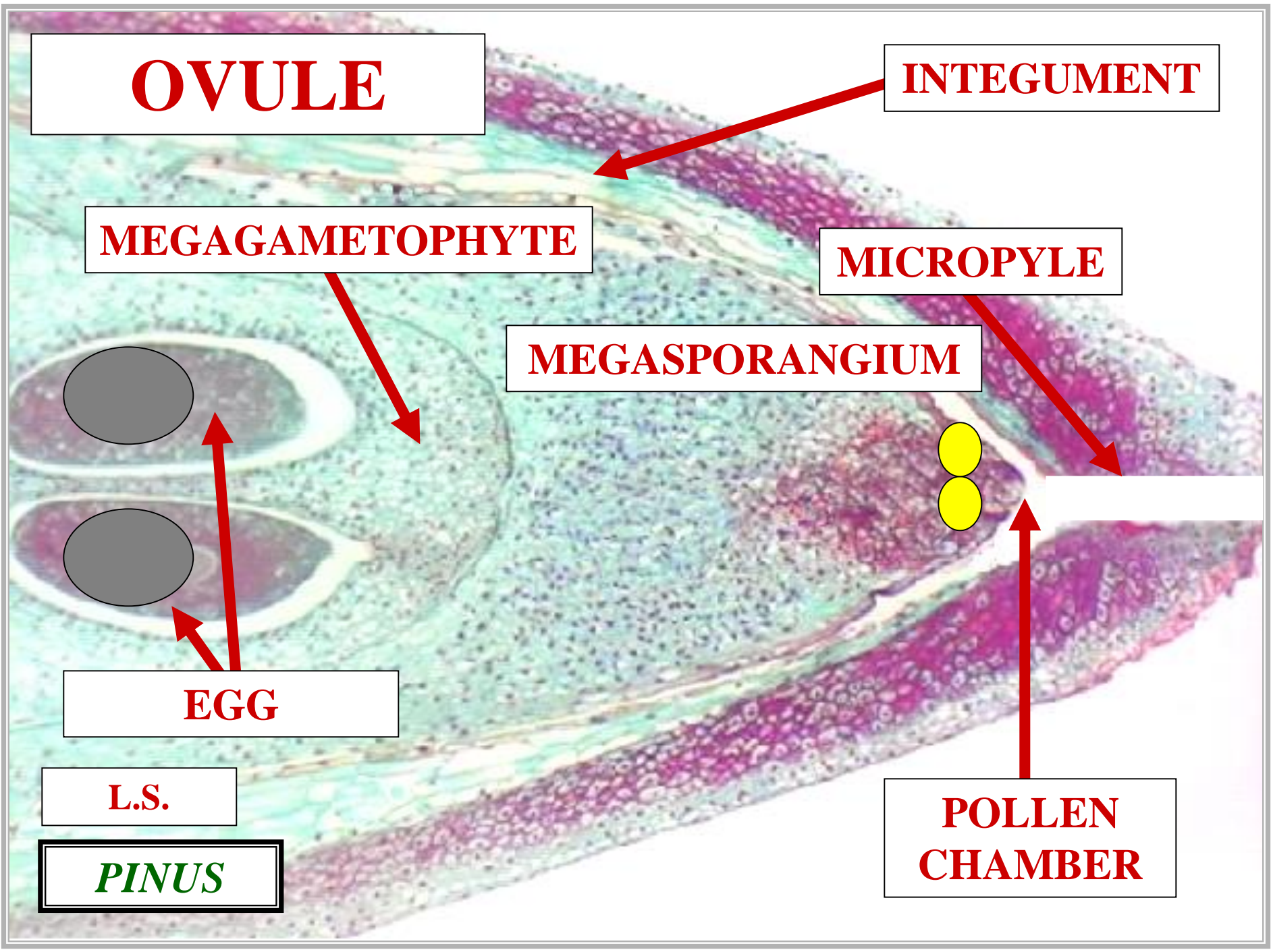
MEGASPORANGIUM

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MICROPYLE

MEGASPORANGIUM

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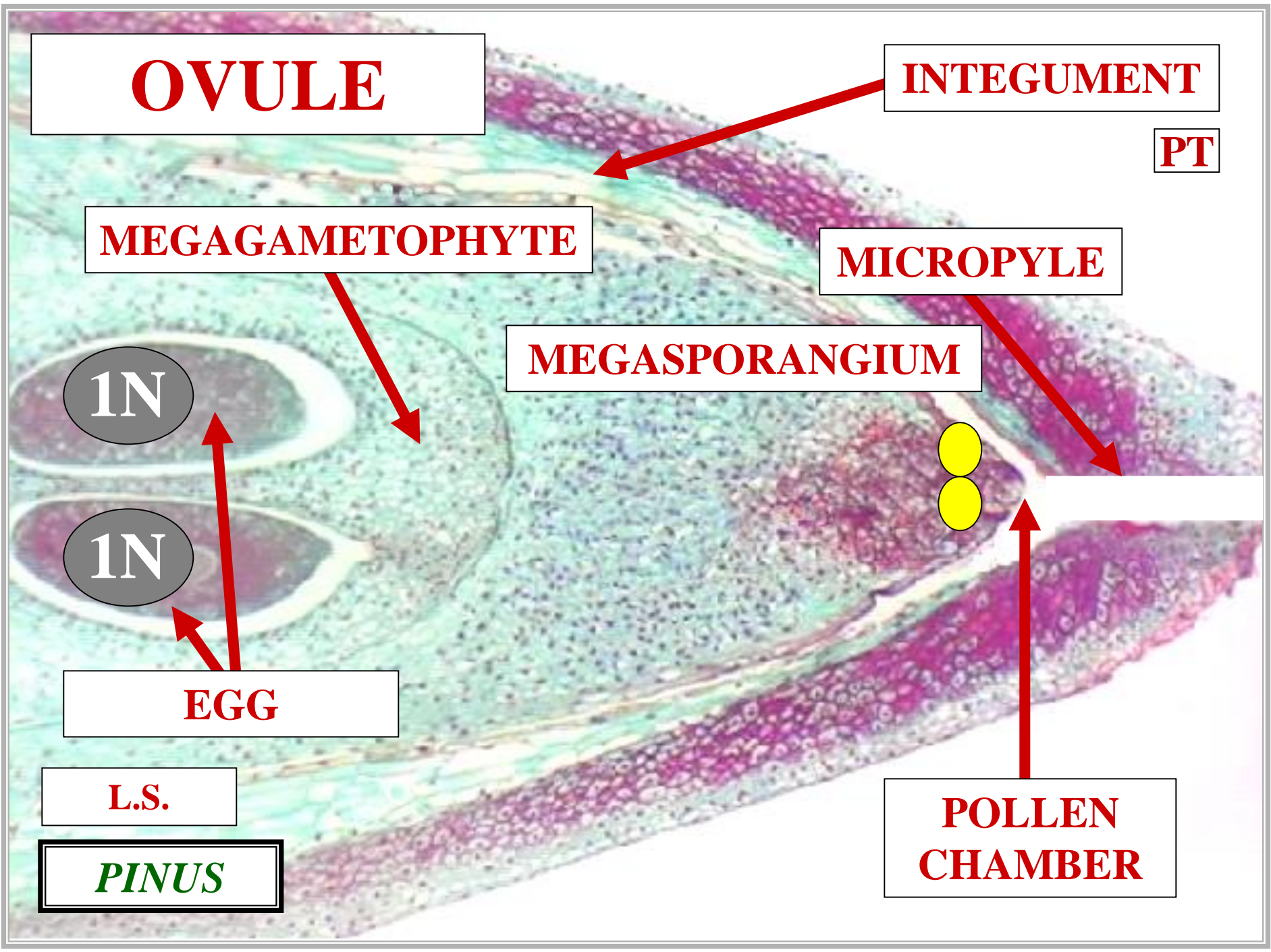
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MEGASPORANGIUM

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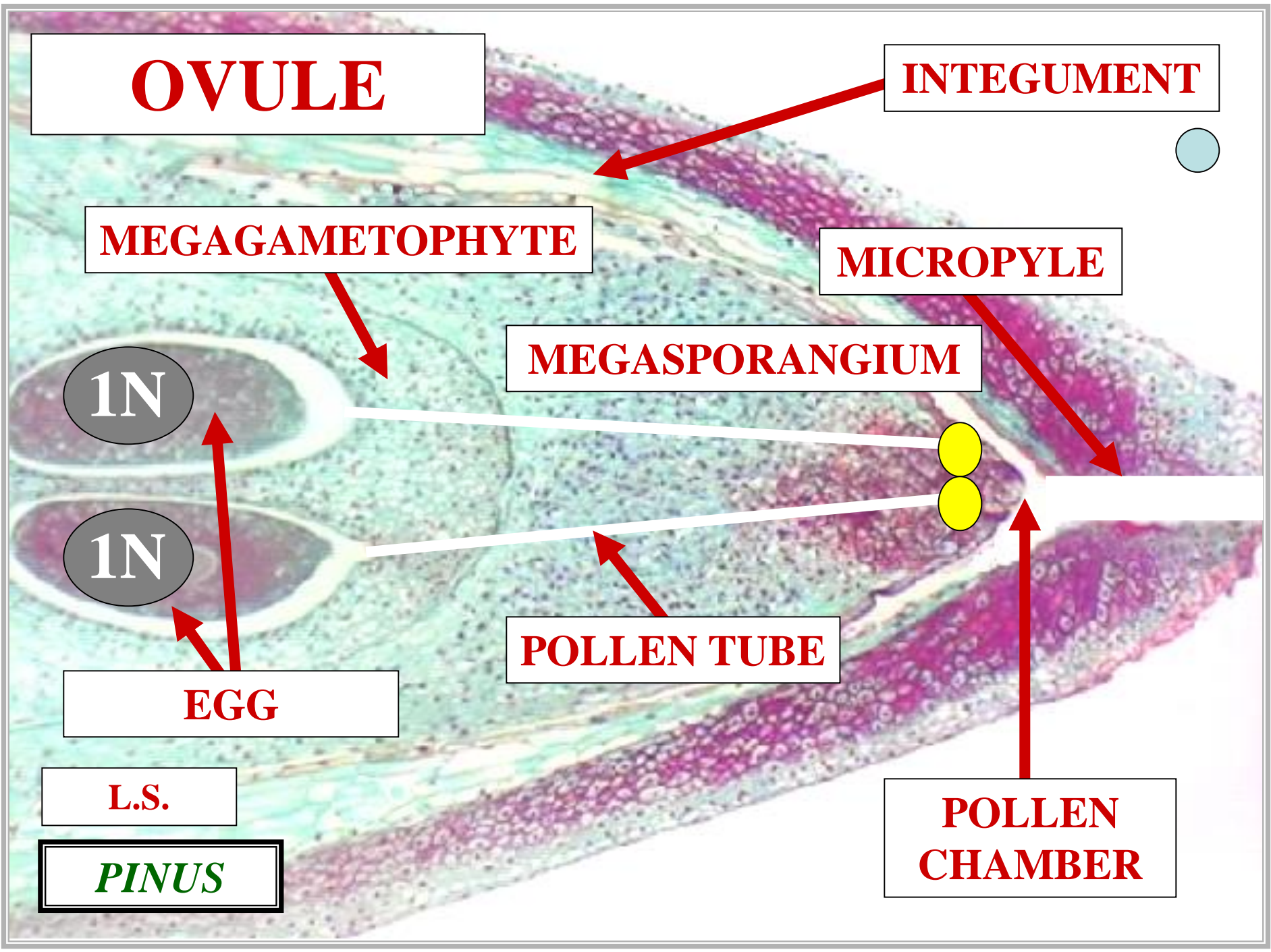
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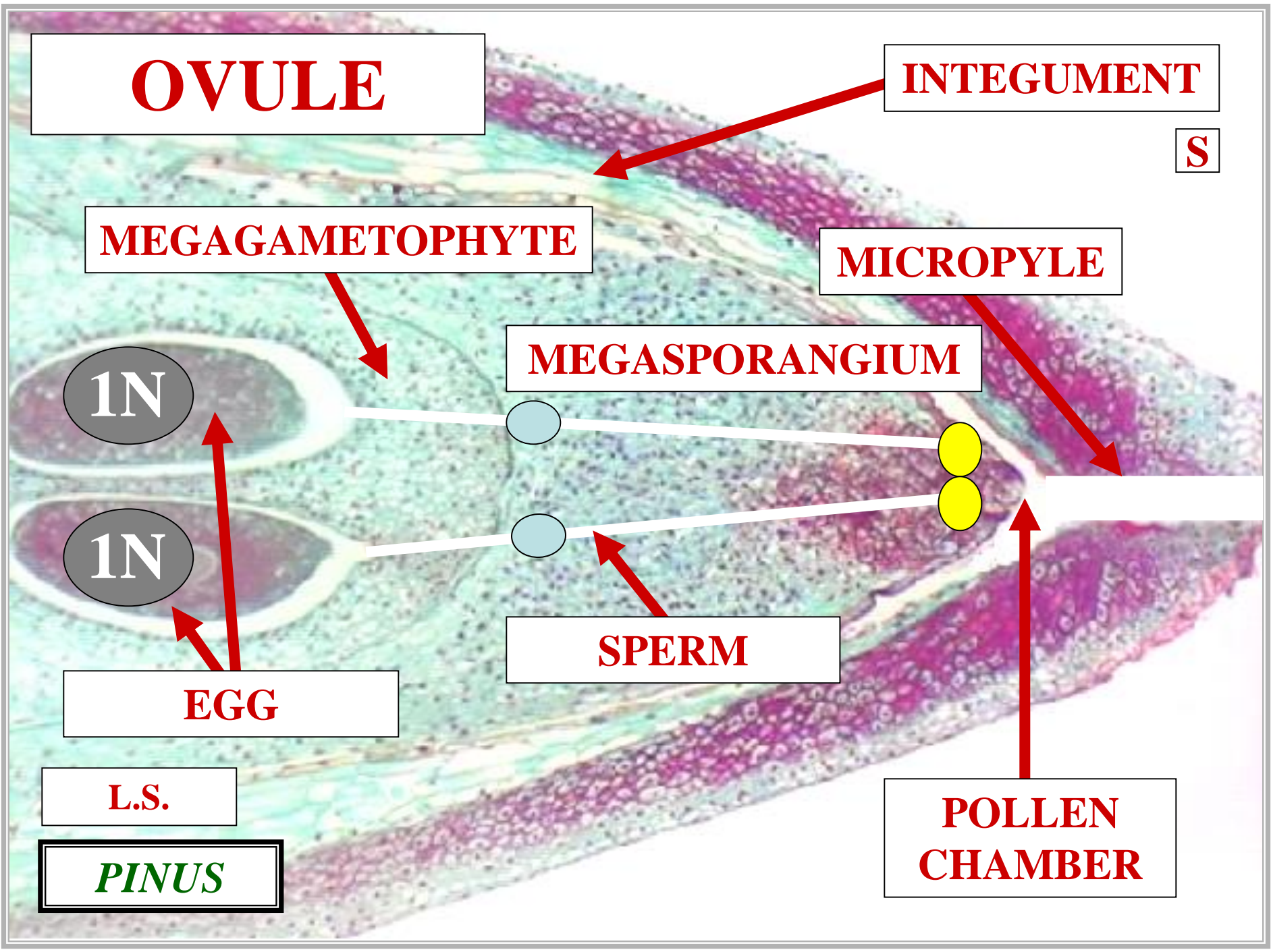
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**POLLEN
CHAMBER**



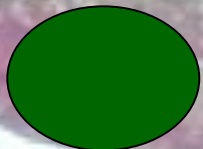
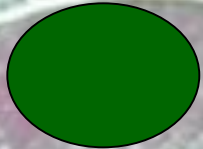
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MICROPYLE

MEGASPORANGIUM



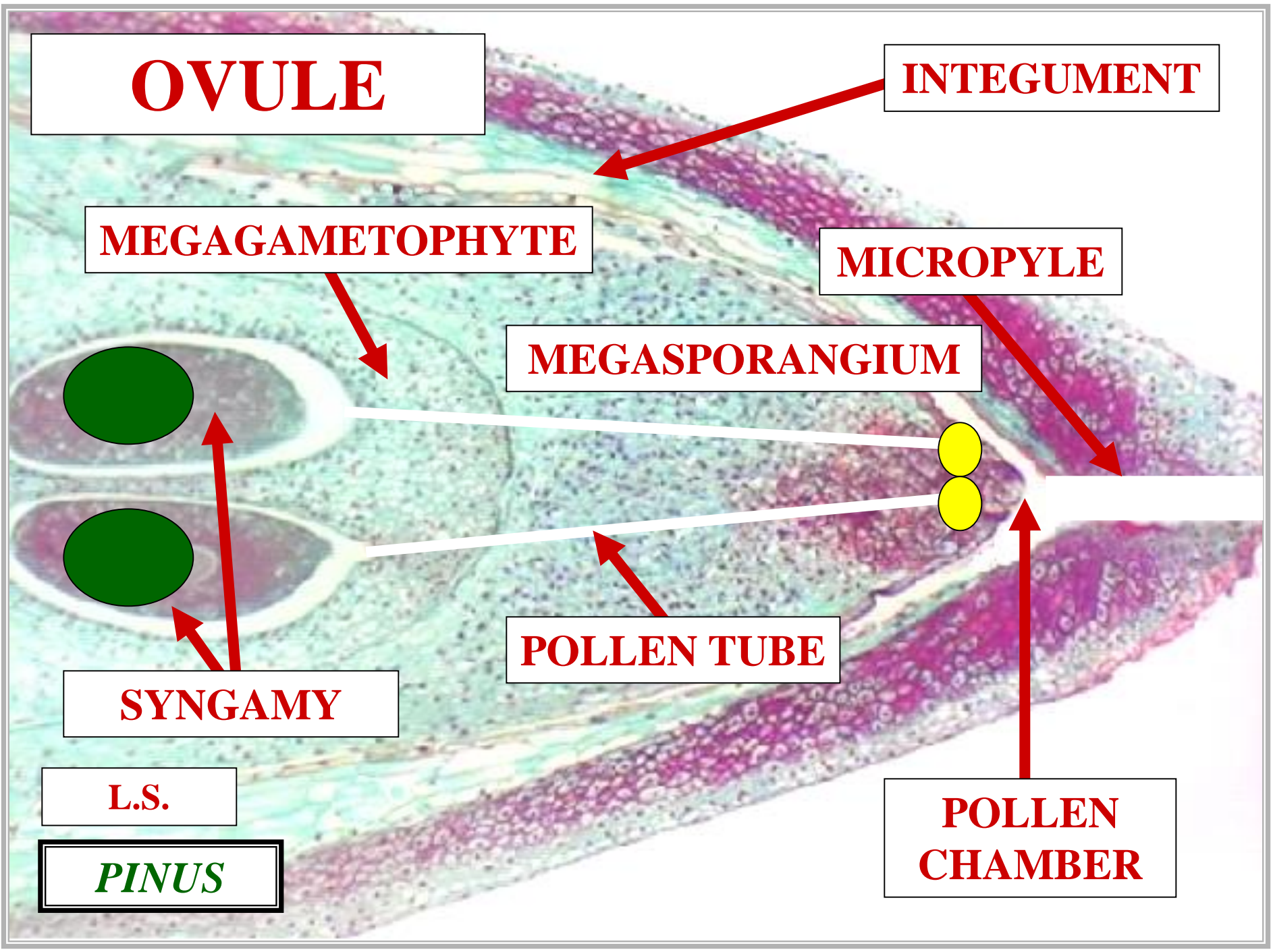
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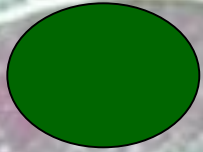
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MEGASPORANGIUM



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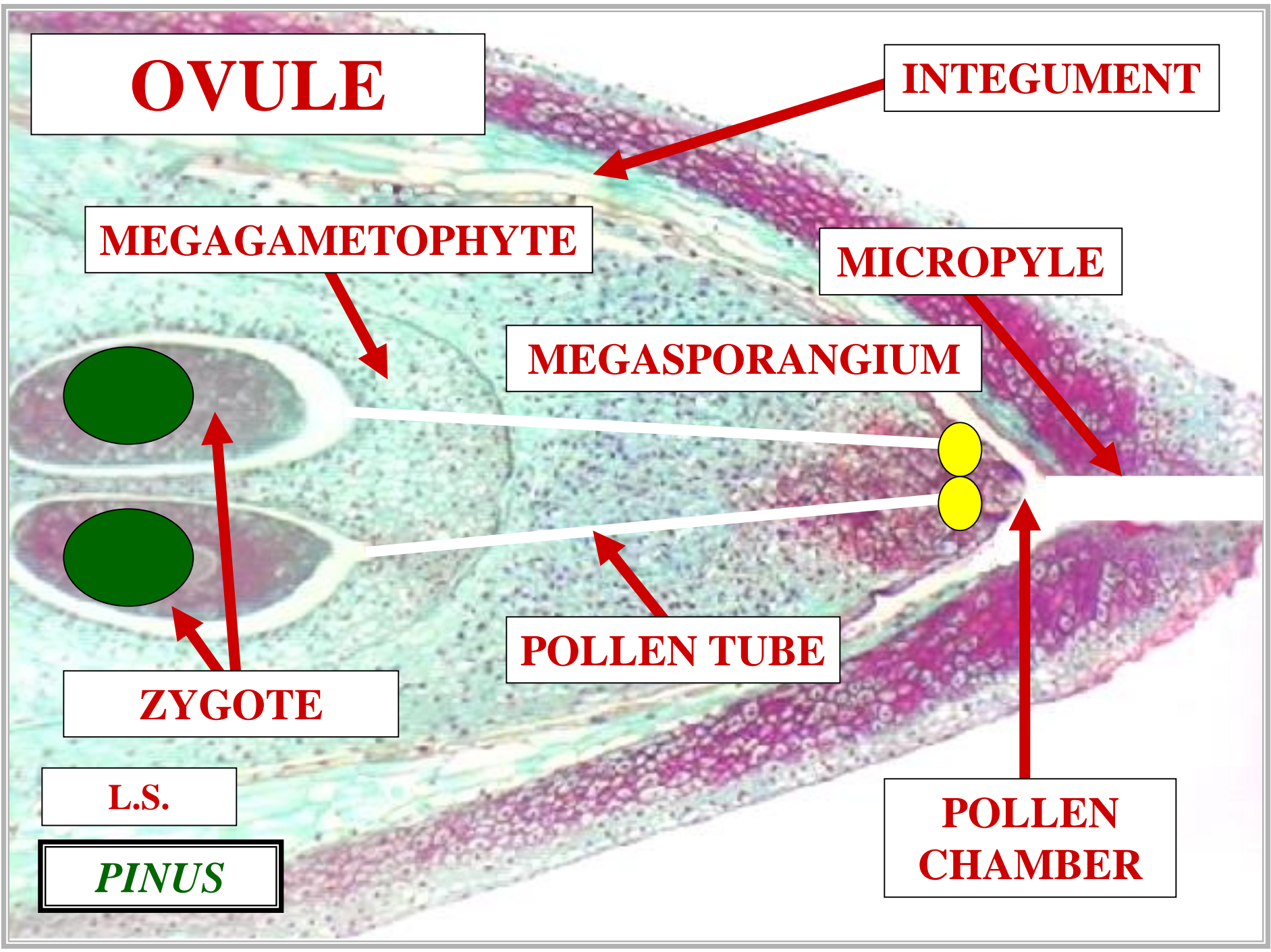


POLLEN TUBE

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**POLLEN
CHAMBER**

PINUS



OVULE

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MICROPYLE

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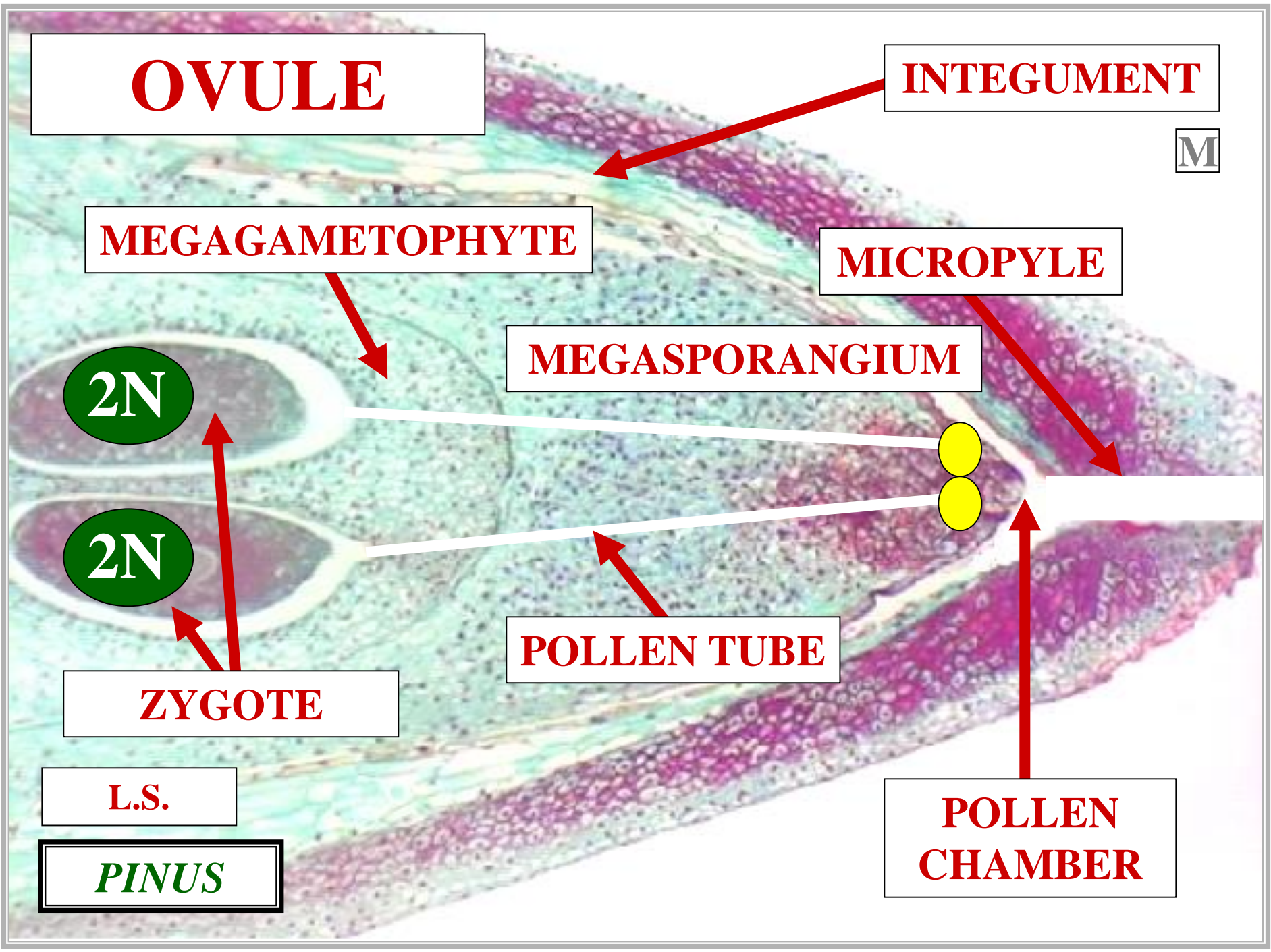
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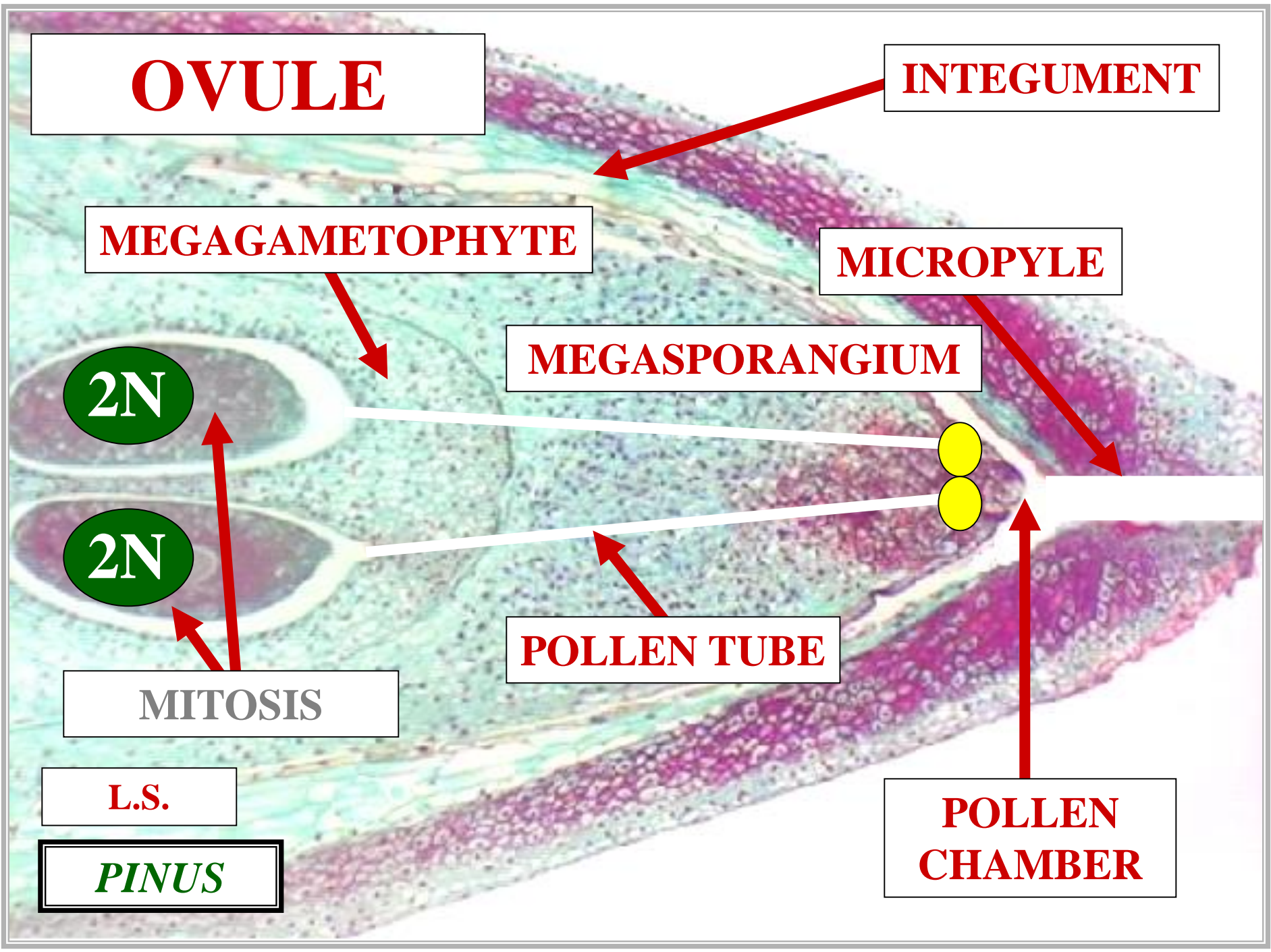
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POLLEN CHAMBER



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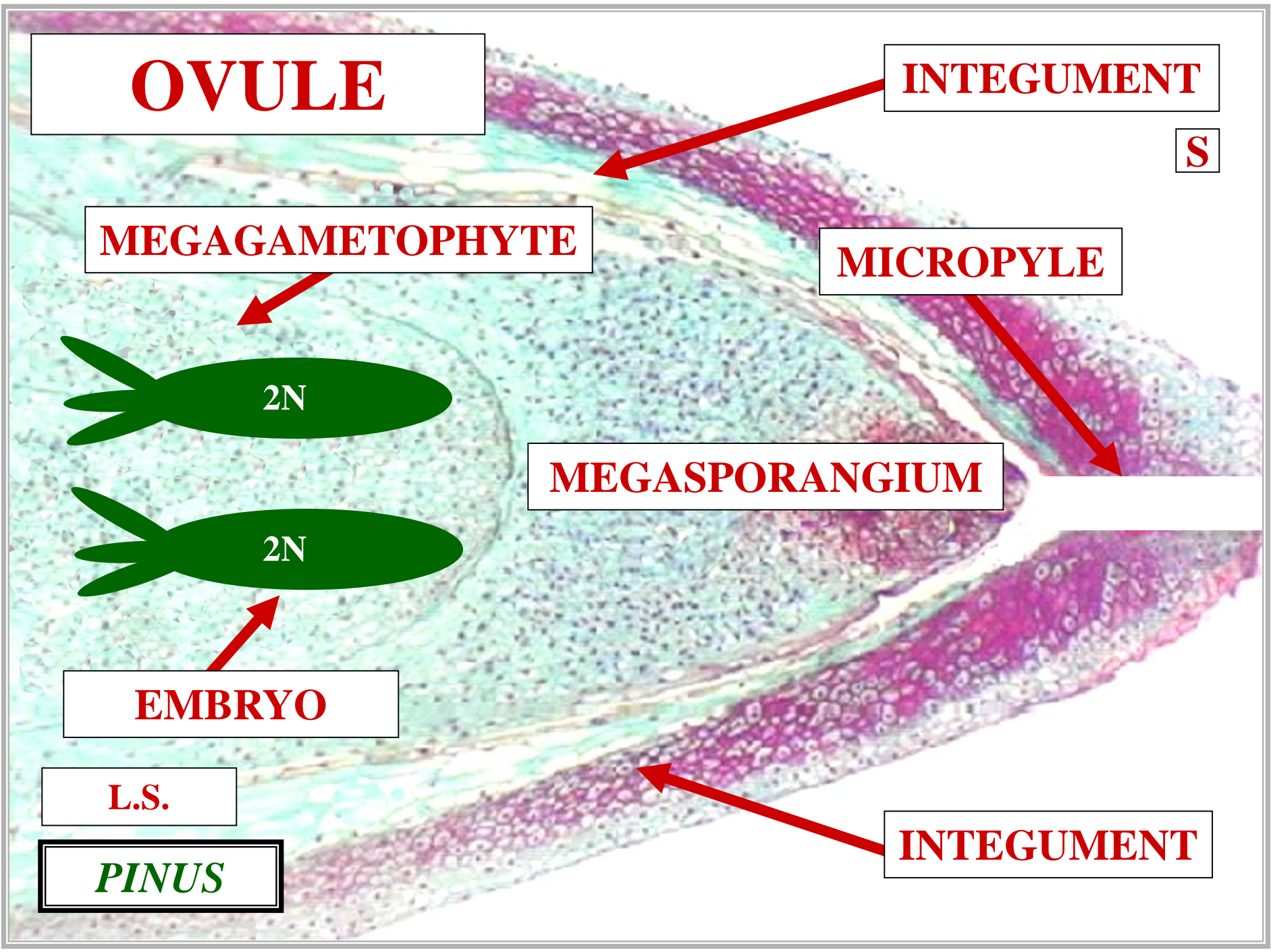
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MICROPYLE

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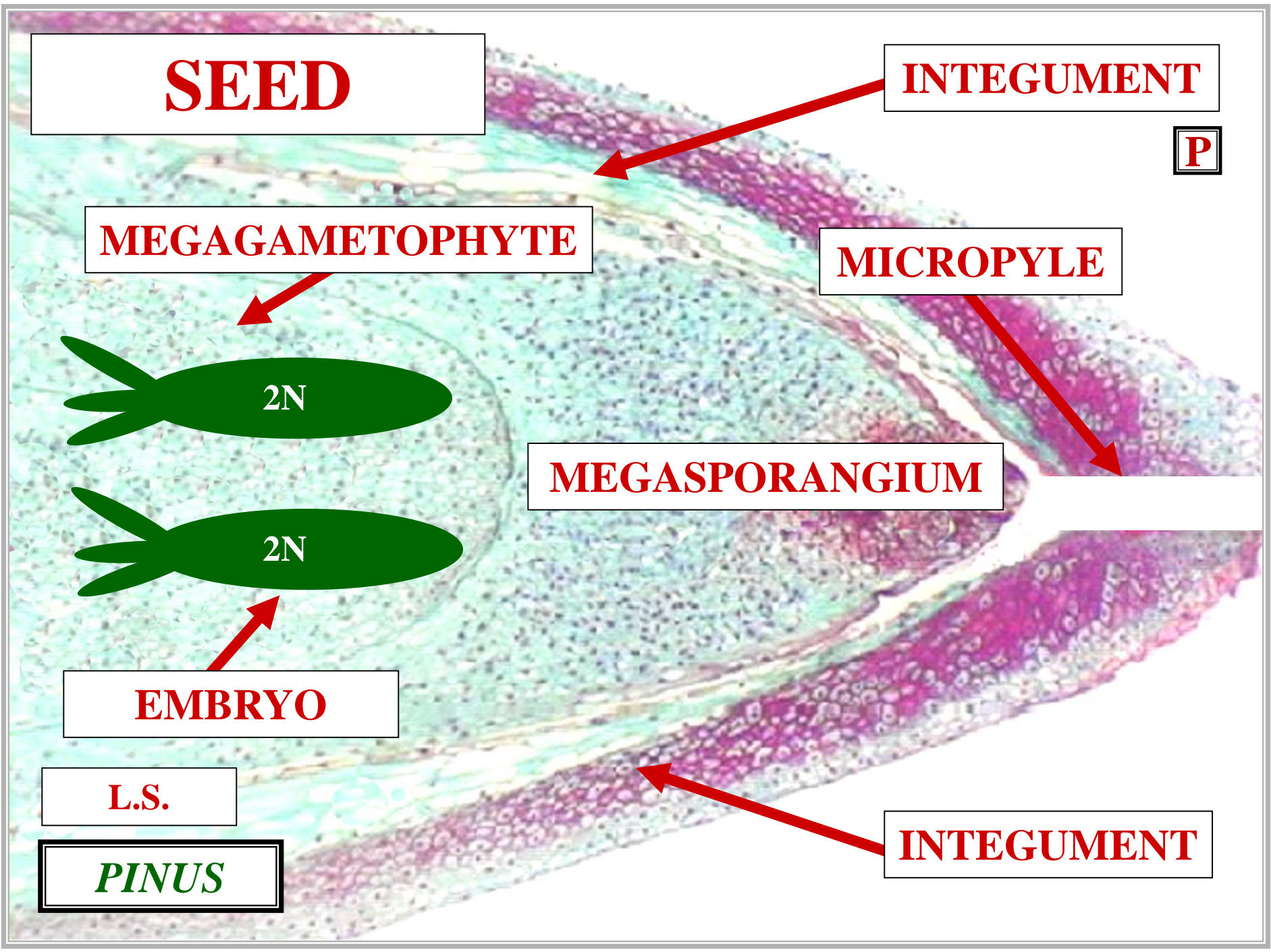
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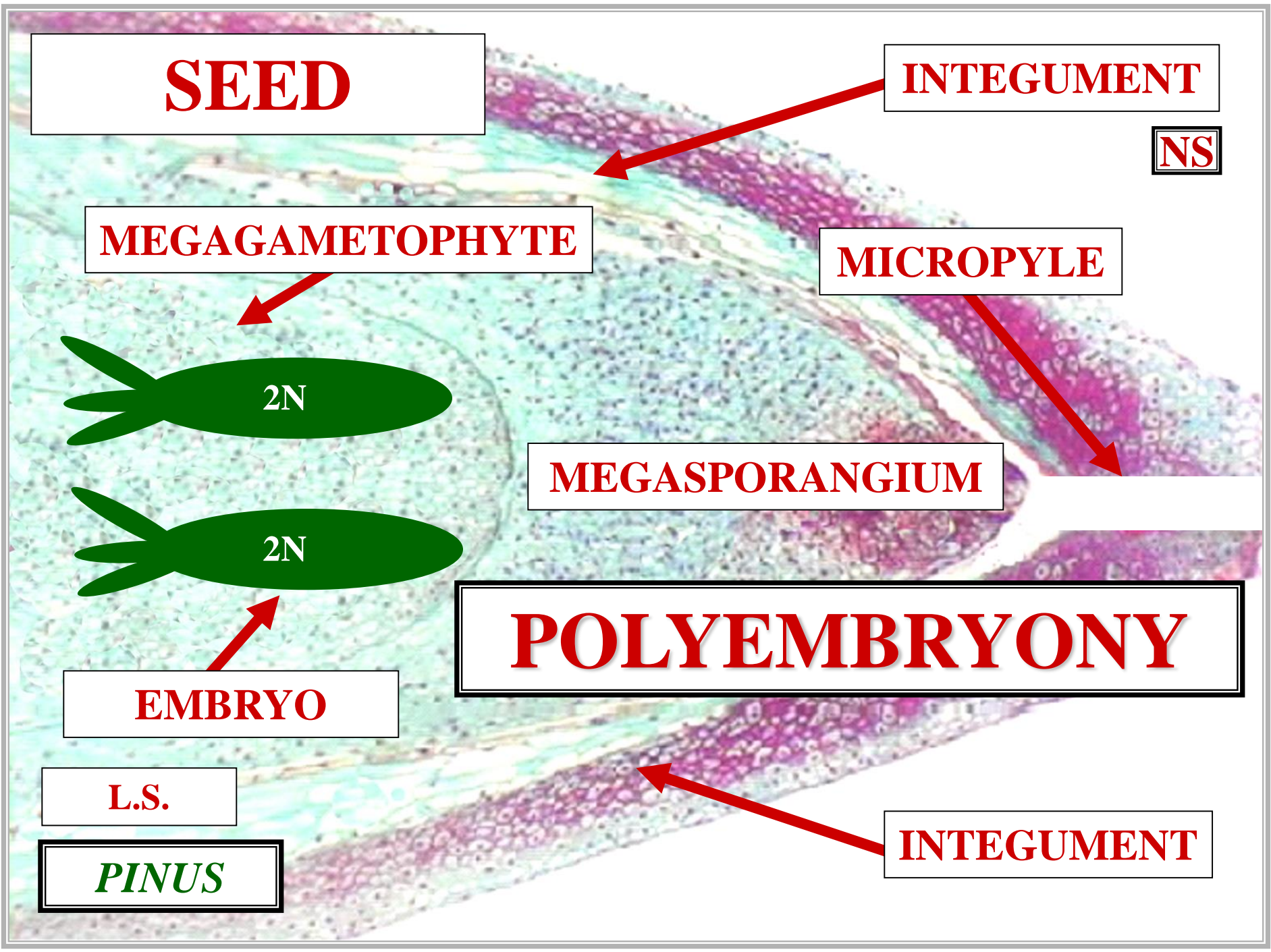
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MEGAGAMETOPHYTE

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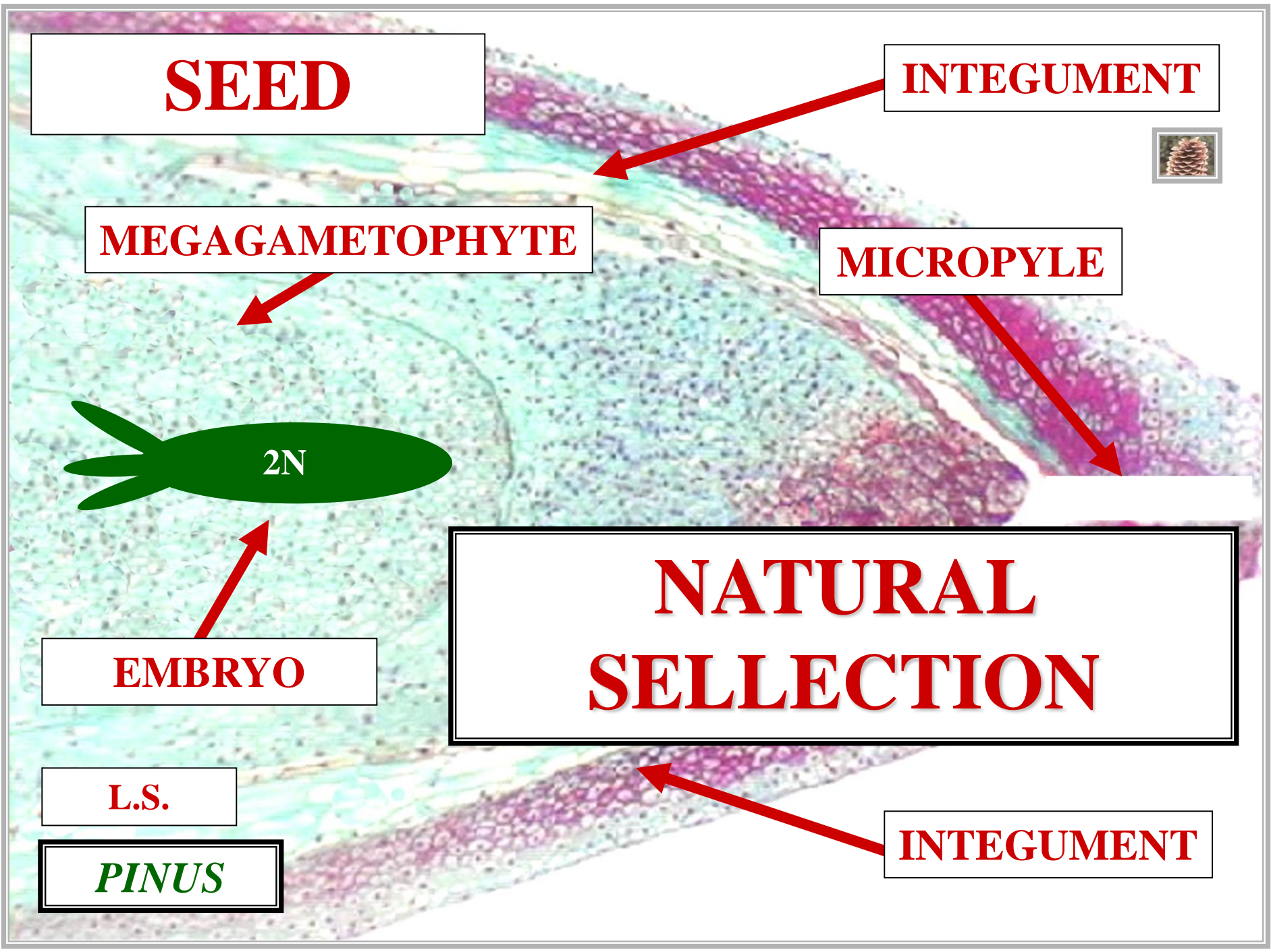
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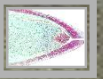
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PINUS

INTEGUMENT



MEGASTROBILUS



SEED WIND DISPERSAL



PINUS

SEED

INTEGUMENT

G

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MEGAGAMETOPHYTE

MICROPYLE

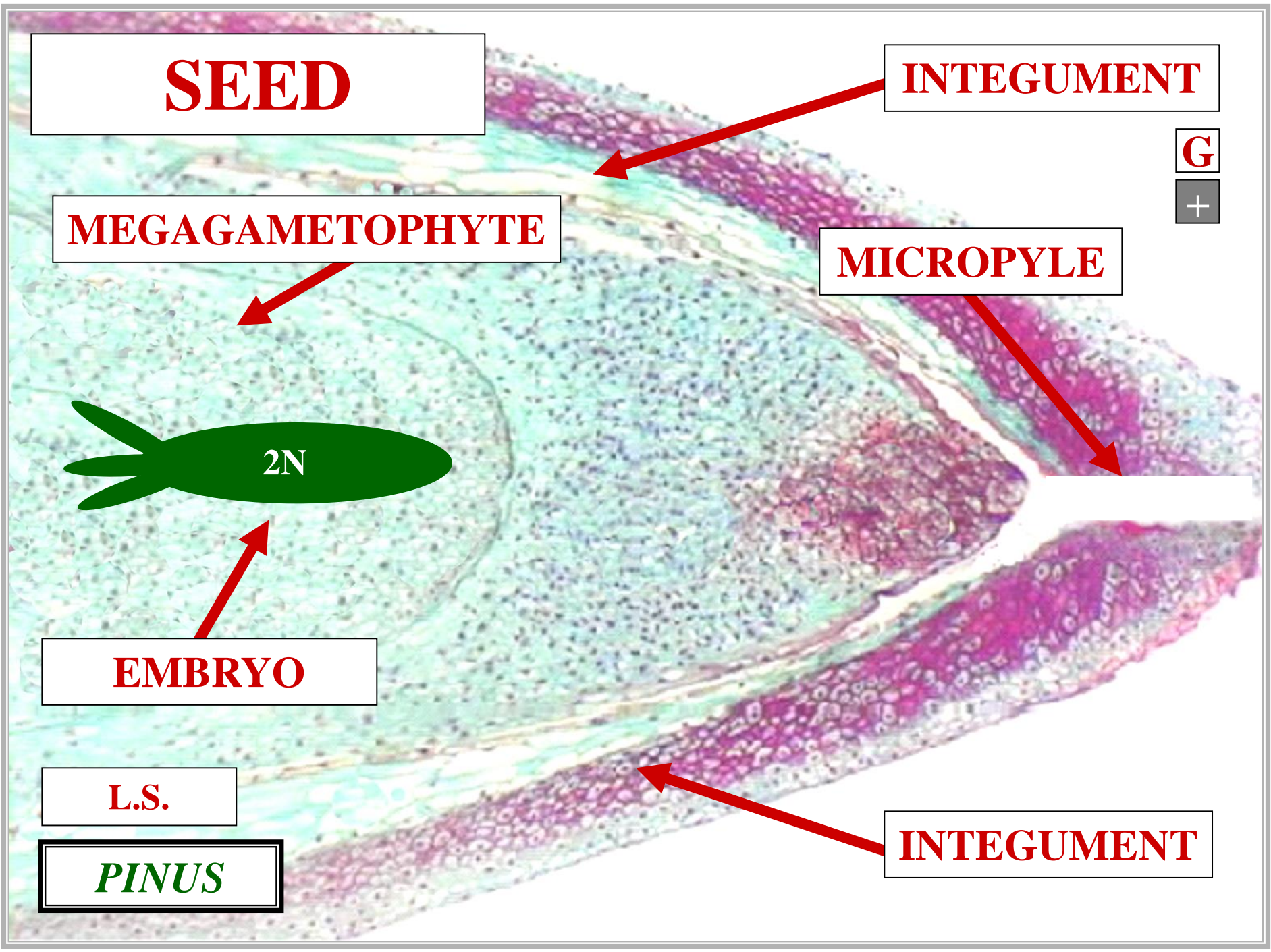
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GERMINATION

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MEGAGAMETOPHYTE

MICROPYLE



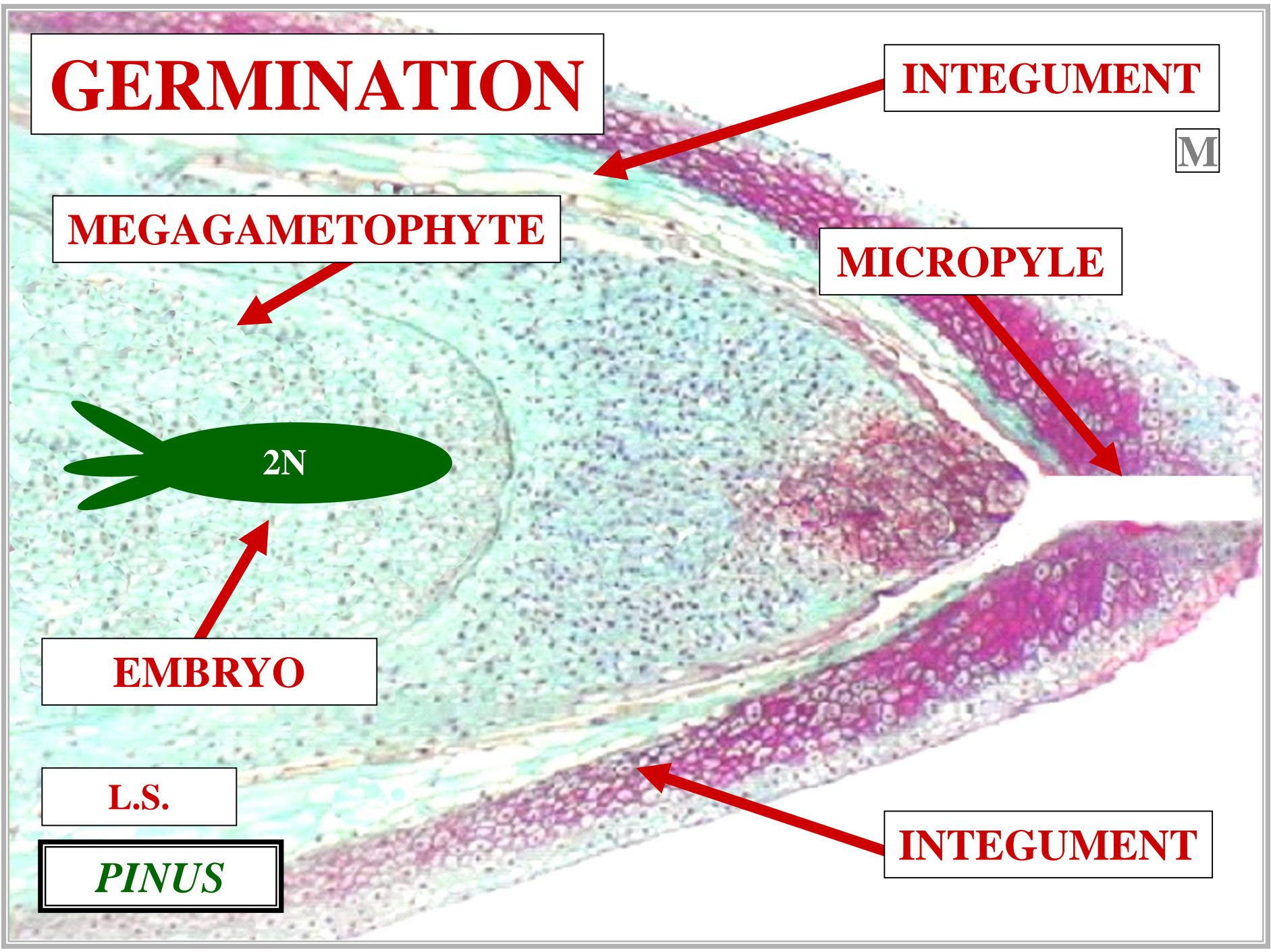
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MICROPYLE

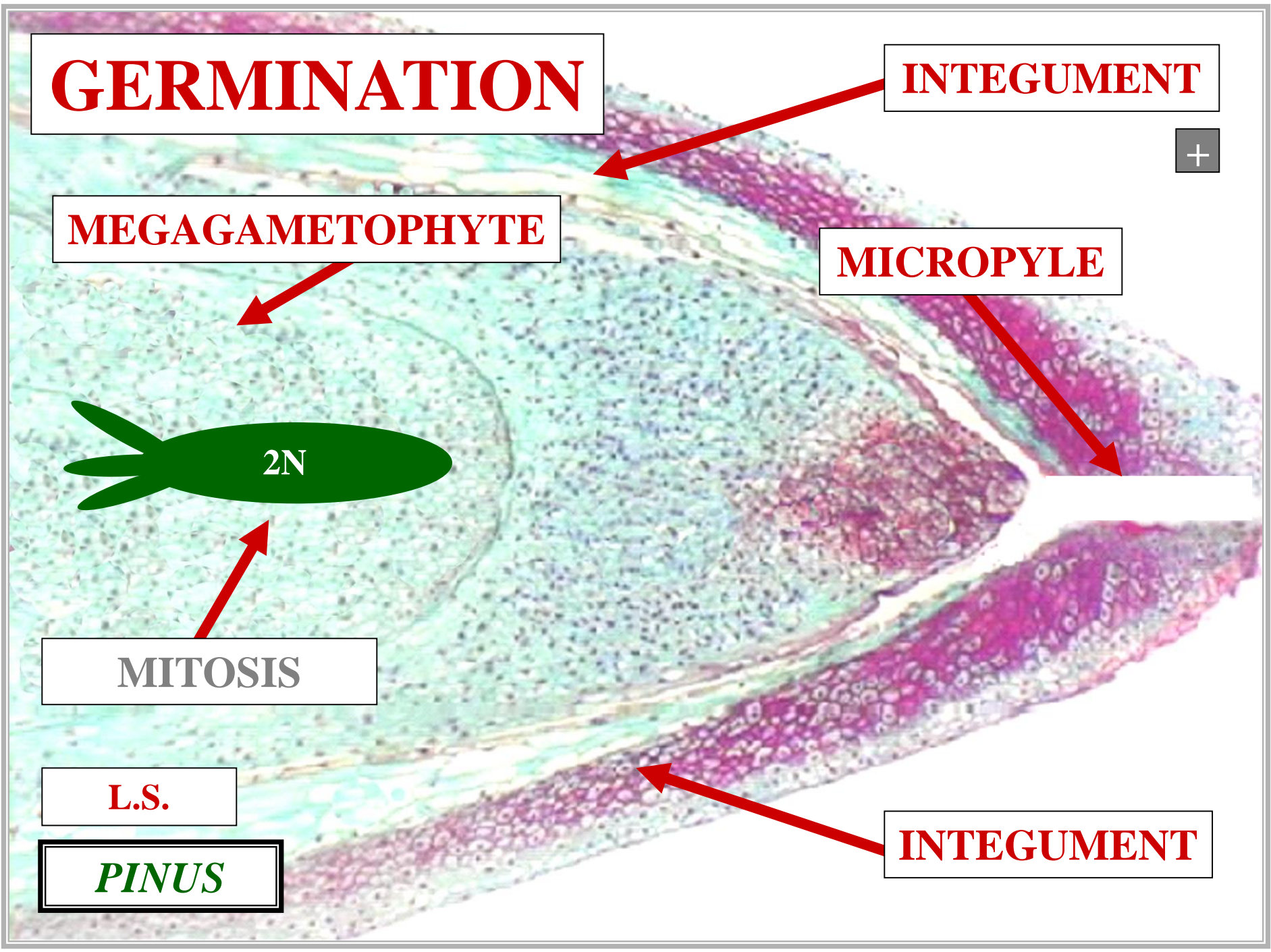
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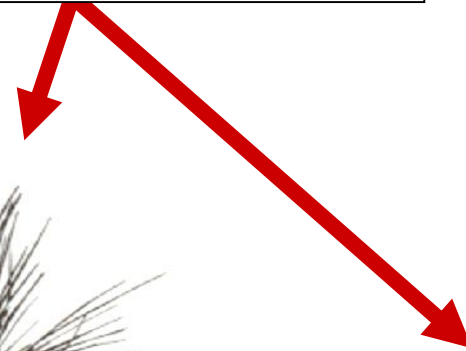
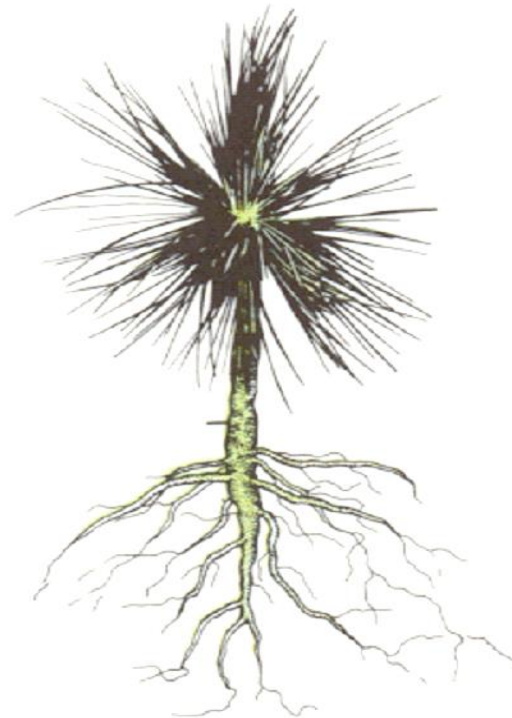
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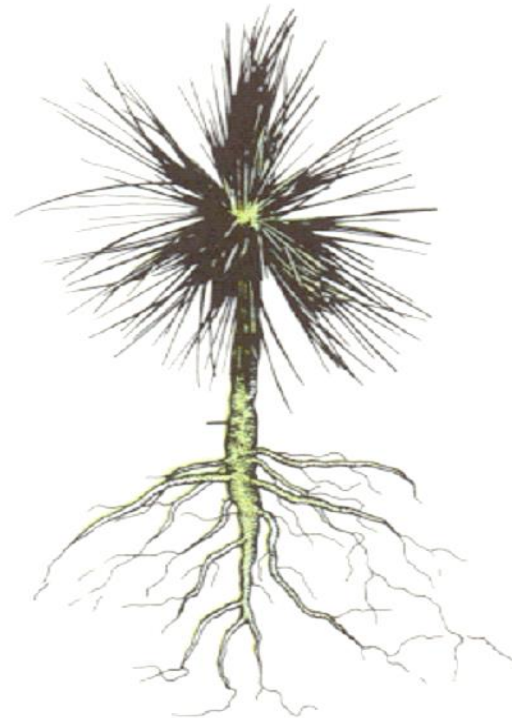
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YOUNG SPOROPHYTE



PINUS

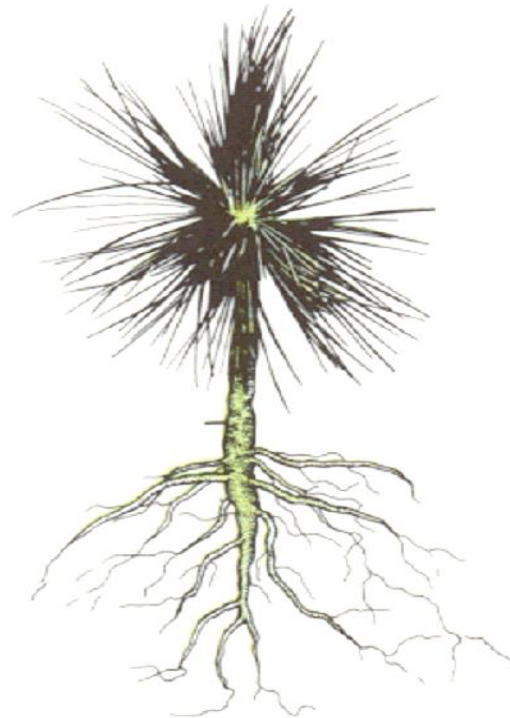
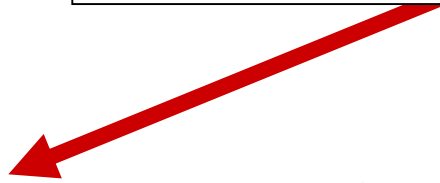
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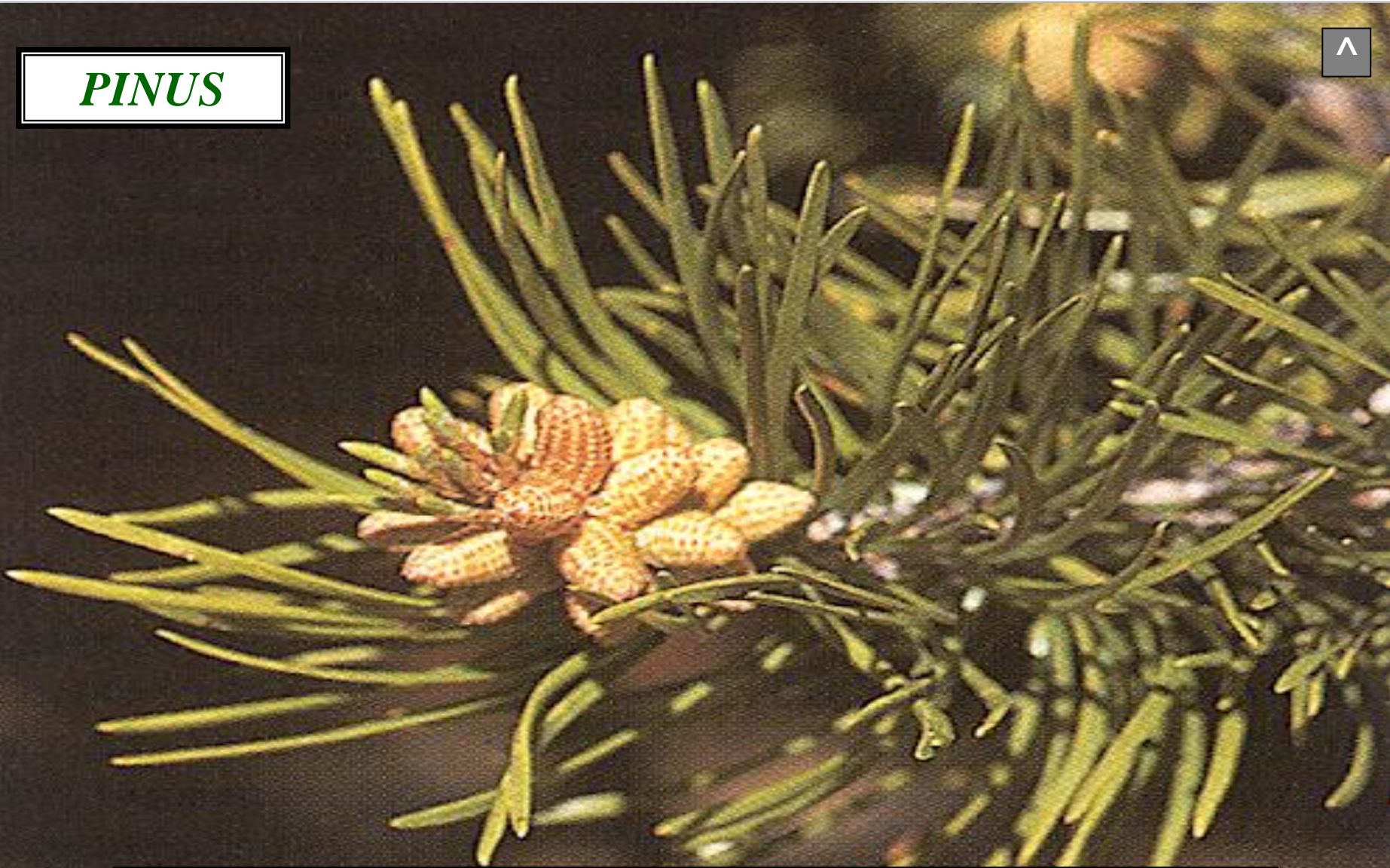


MATURE SPOROPHYTE





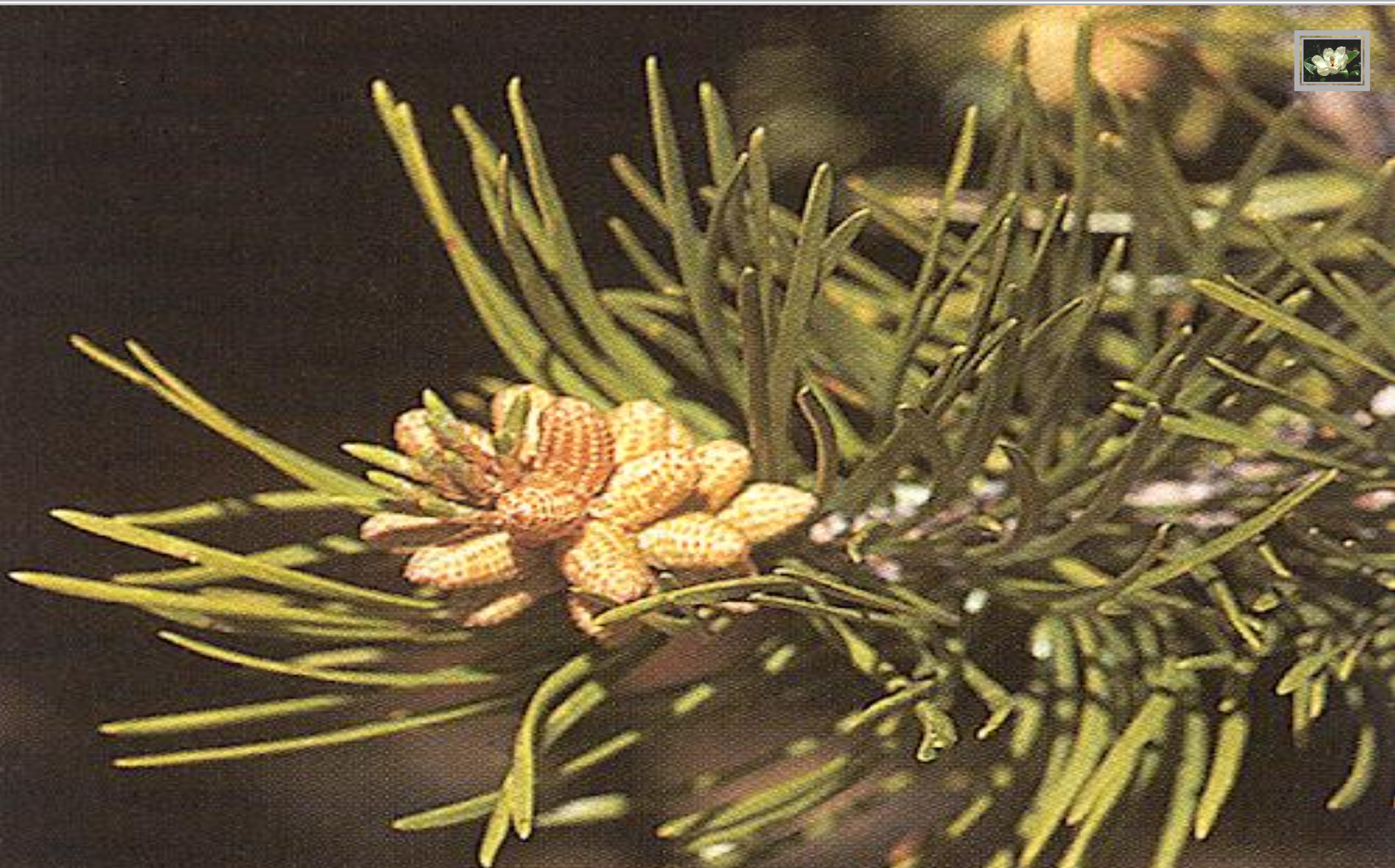
PINUS



PINOPHYTA



**ALABAMA
SPERMATOPHYTE
PHYLA**



PINOPHYTA



MAGNOLIOPHYTA



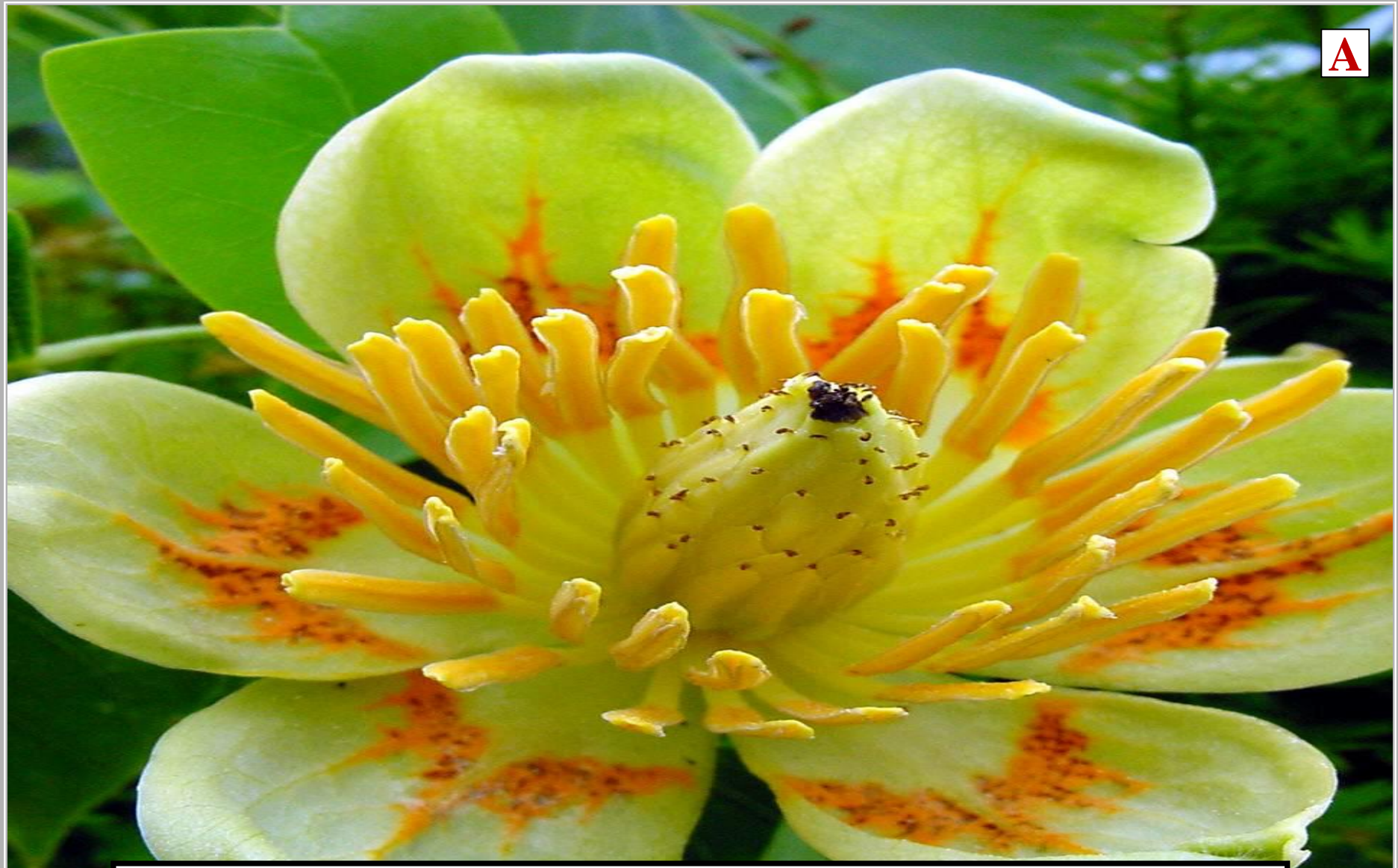
ALABAMA
TRACHEOPHYTE

PHYLUM
MAGNOLIOPHYTA

ALABAMA
TRACHEOPHYTE



SYNONYM



ANTHOPHYTA

ANTHER



ANTHOPHYTA



COMMON NAMES



ANGIOSPERMS



FLOWERING PLANTS

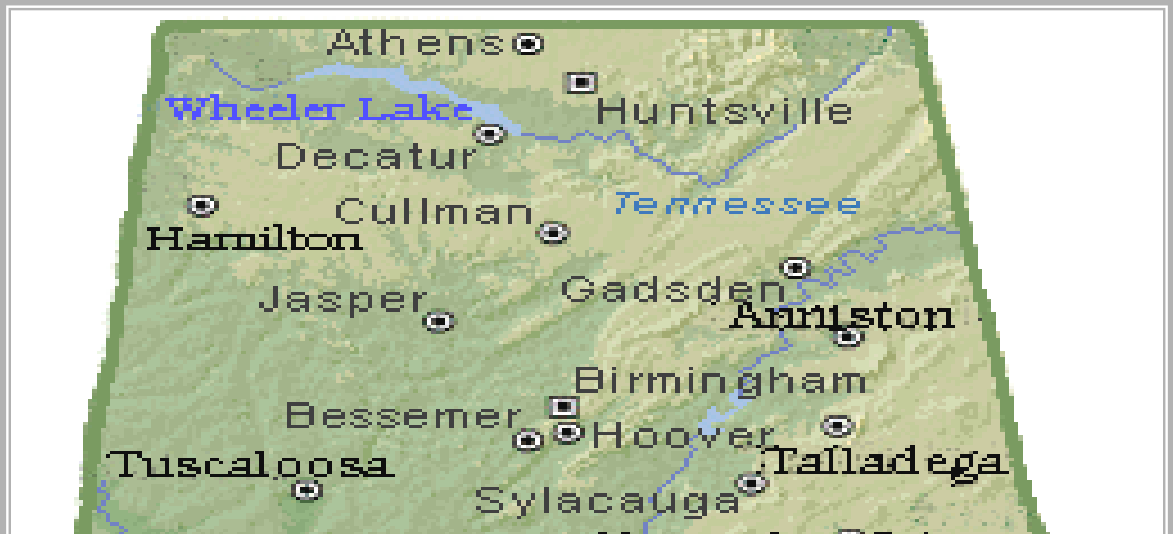


DIVERSITY



~235,000 SPECIES

EARTH



~3,500 SPECIES





**MAGNOLIOPHYTA
MOST DIVERSE
TRACHEOPHYTE
PHYLUM**

EARTH



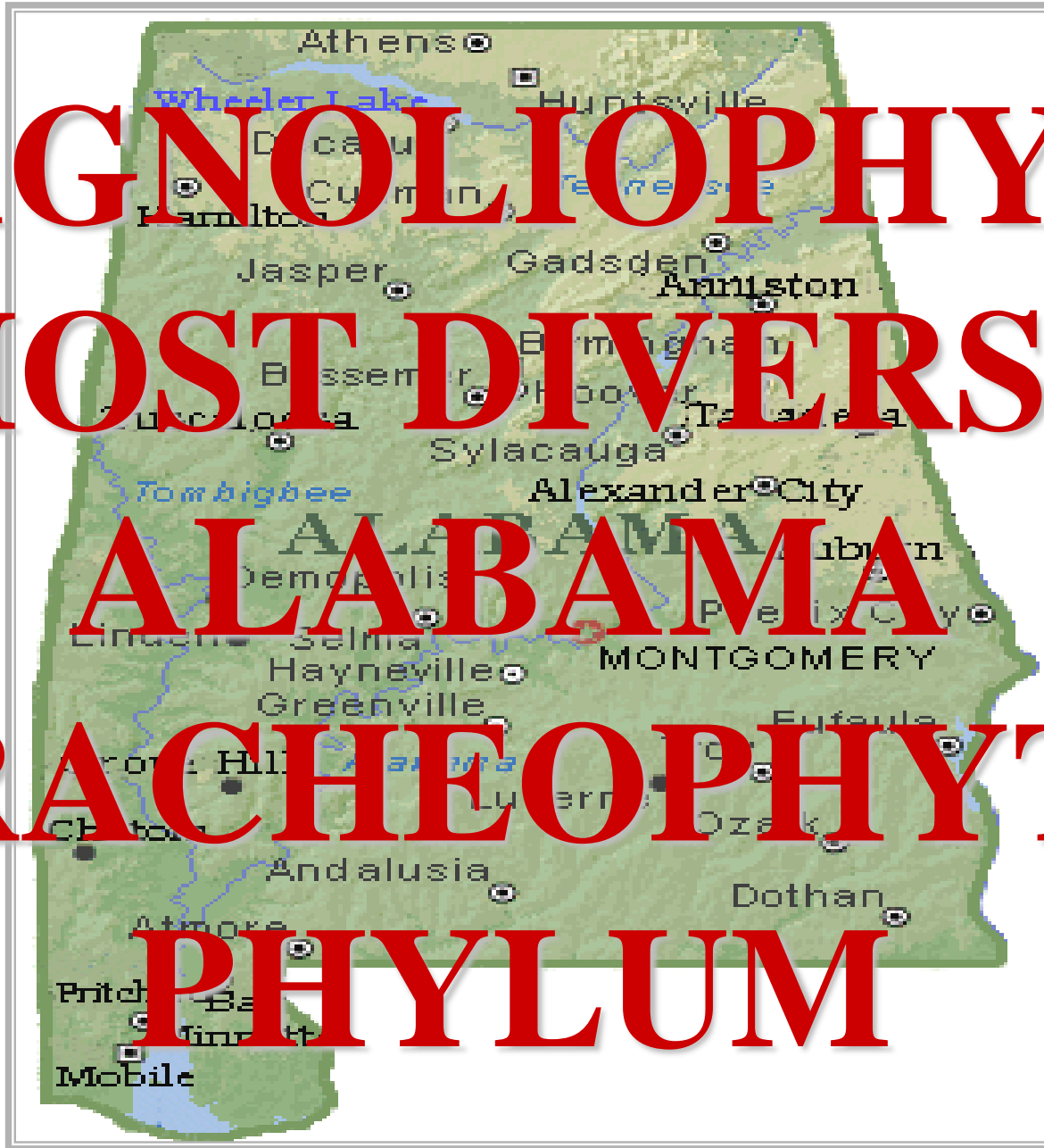
MAGNOLIOPHYTA

MOST DIVERSE

ALABAMA

TRACHEOPHYTE

PHYLUM

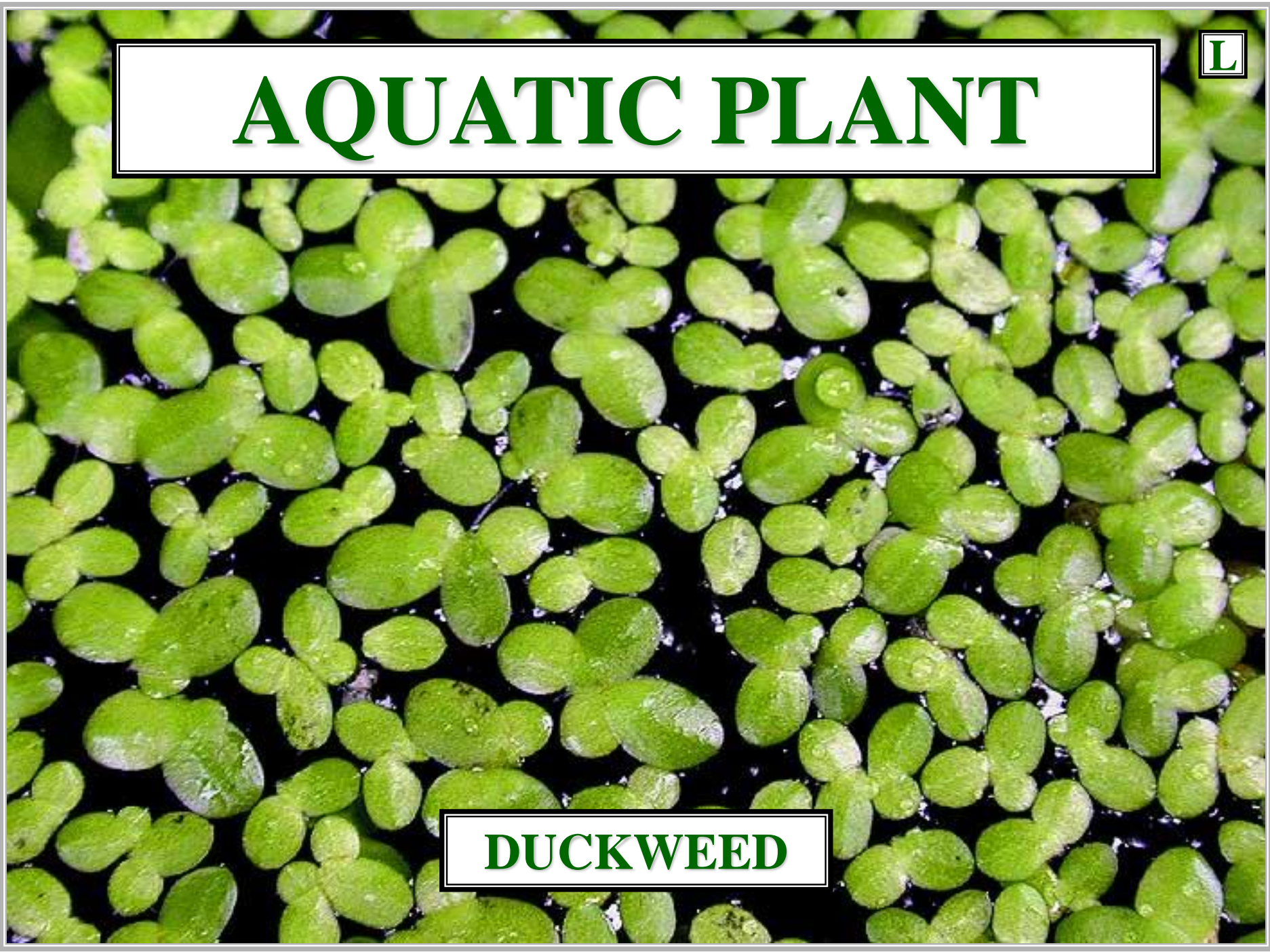


AQUATIC PLANT

?

AQUATIC PLANT

DUCKWEED





AQUATIC PLANT



LEMNA

AQUATIC PLANT



LEMNA



RAFFLESIA