

Filo: ASCOMYCOTA

- filo monofilético
- com cerca de 64 000 espécies*
- 75% das espécies de fungos descritas
- unicelulares ou filamentosos ou dimórficos
- hifas com septos perfurados
- formam ascos
- fósseis datados de 1 bilhão de anos

saprófitos

necrotróficos

parasitas

simbiontes mutualísticos

associação com algas com cerca de 40% das espécies

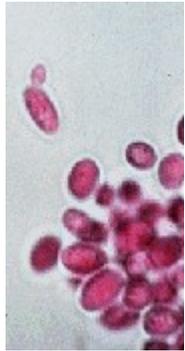
associação com plantas terrestres

digerem celulose



* <http://www.davidmoore.org.uk/>

ALIMENTOS



Sacharomyces cerevisiae

fermento

morchela



trufa

Tuber melanosporum

MODELOS

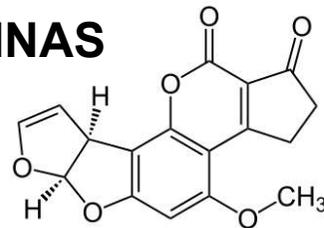
Neurospora crassa

PATÓGENOS

Candida albicans



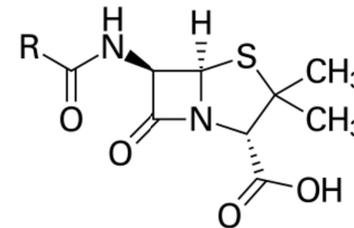
TOXINAS



Aspergillus flavus

aflatoxinas

MEDICAMENTOS



Penicillium chrysogenum



Filo Ascomycota

anamorfa + teleomorfa = holomorfa

base de dados que relaciona anamorfos com seu teleomorfo

<http://www.cbs.knaw.nl/databases/anateleo.htm>

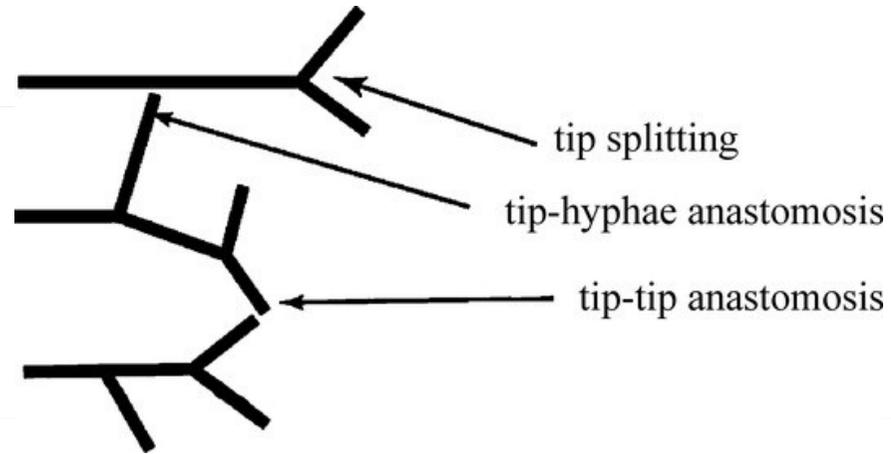


ASCOMYCOTA

filamentosos

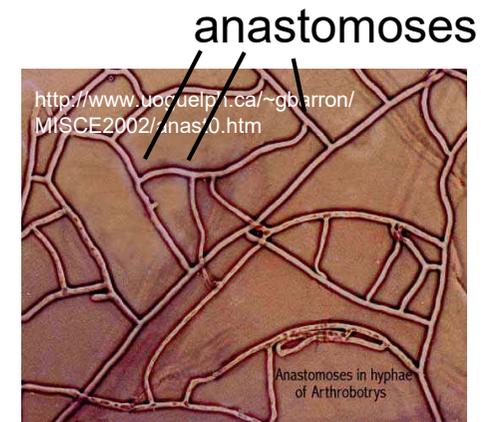
Hifas:

- ramificadas
- com anastomoses frequentes
- células mono ou multinucleadas
- com septos perfurados



As hifas formam um micélio que pode ser:

- homocariótico
 - heterocariótico (formado após anastomose)
- sendo que os diferentes núcleos as vezes não se dividem na mesma velocidade



Caraterísticas marcantes:

hifas septadas

mobilidade das organelas por entre as células

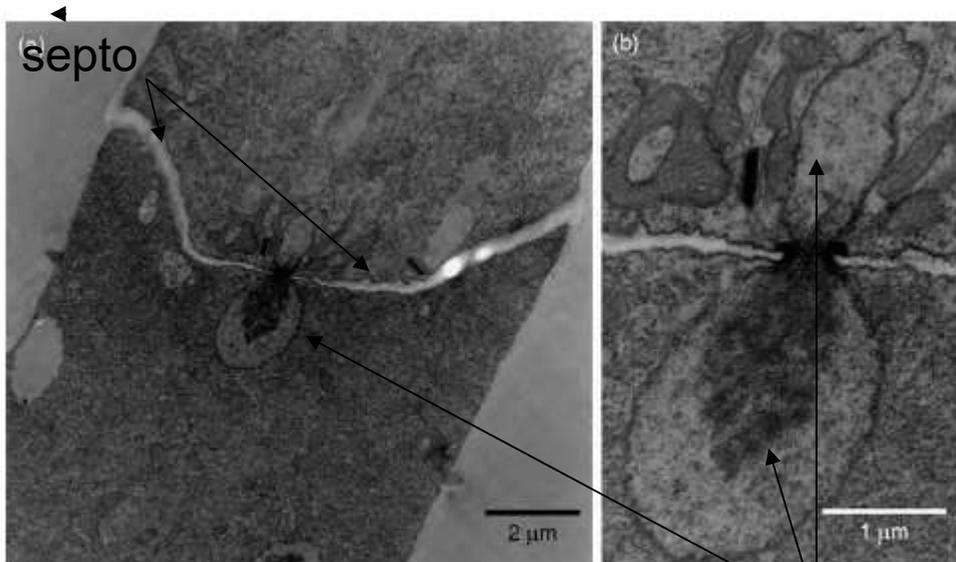
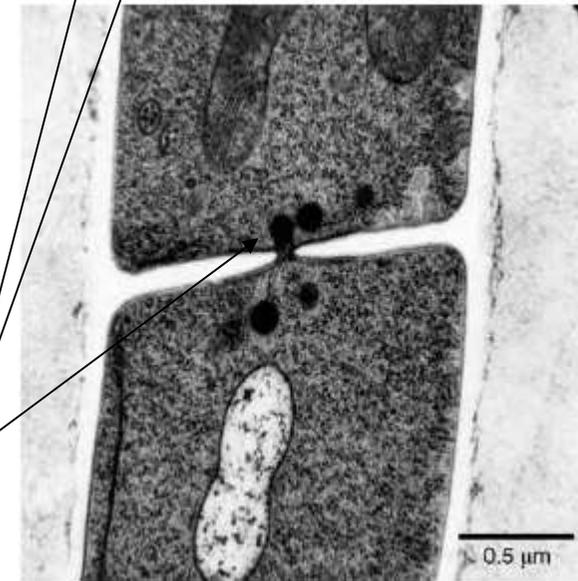
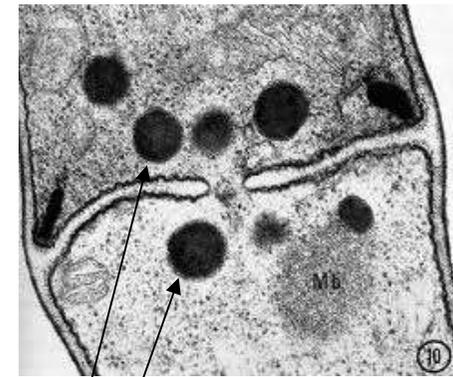


Fig 8.2 Nucleus of *Botrytis cinerea* passing through a septal pore. (a) View of the entire hyphal diameter; (b) Close up. Note the constricted appearance of the nucleus.

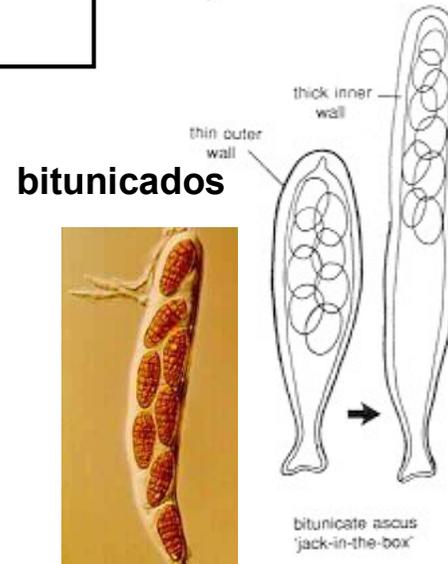
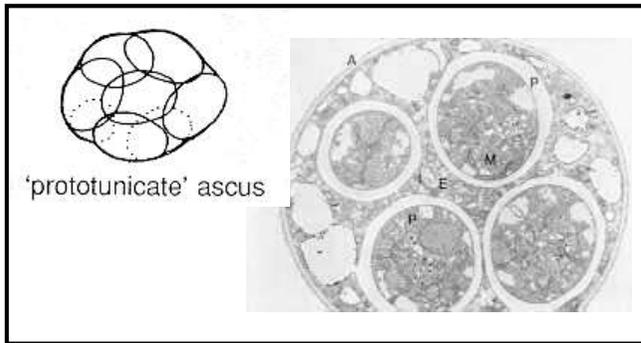
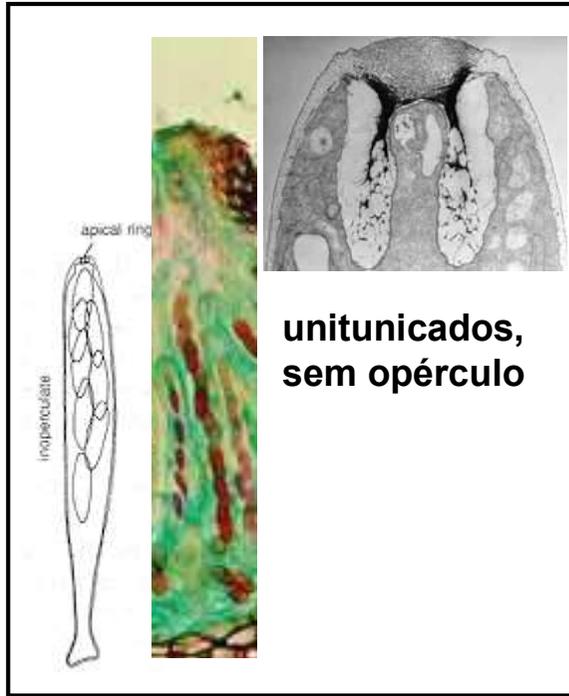
núcleo

corpos de Woronin
(proteína)

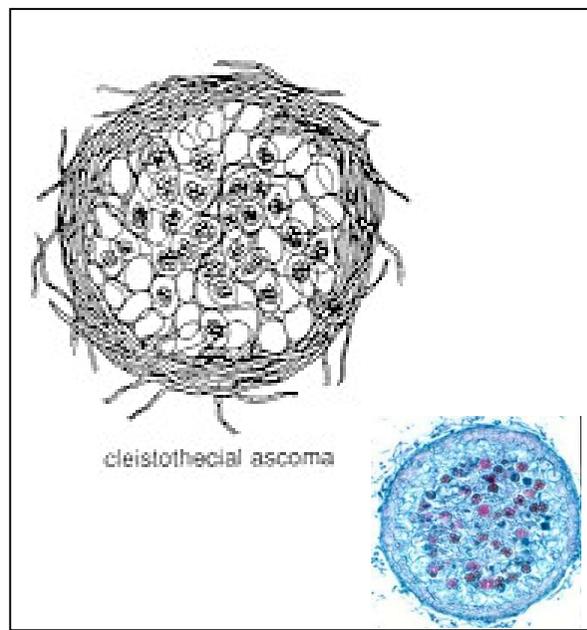
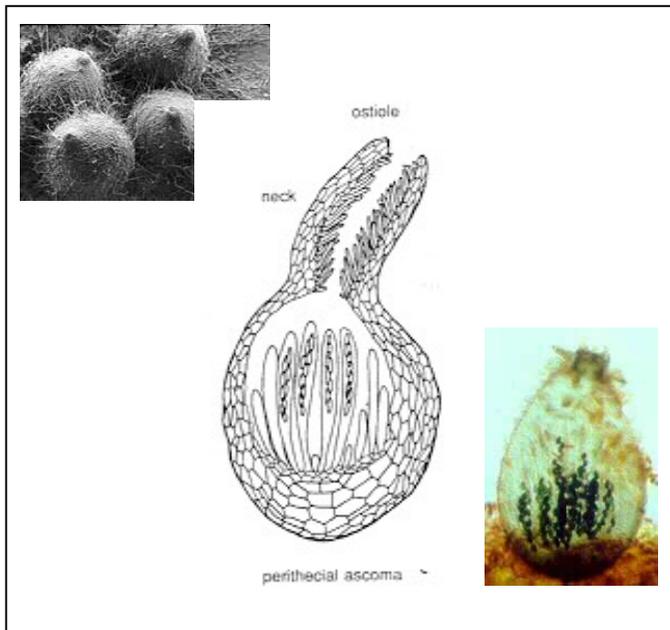
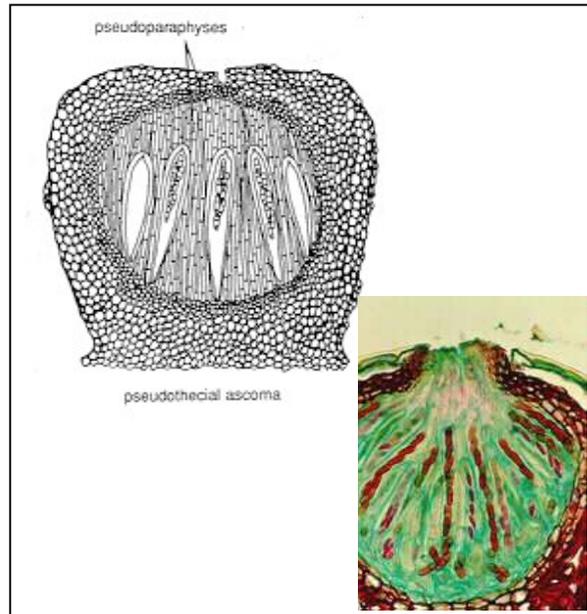
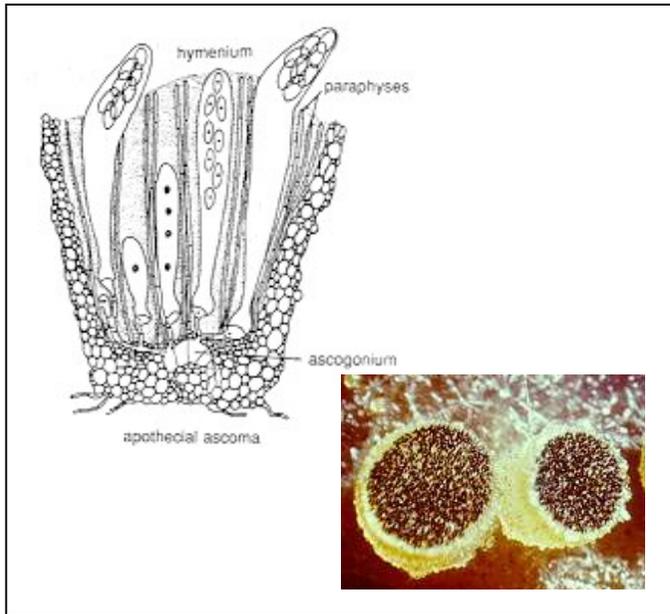


Pode haver mais de um núcleo por célula

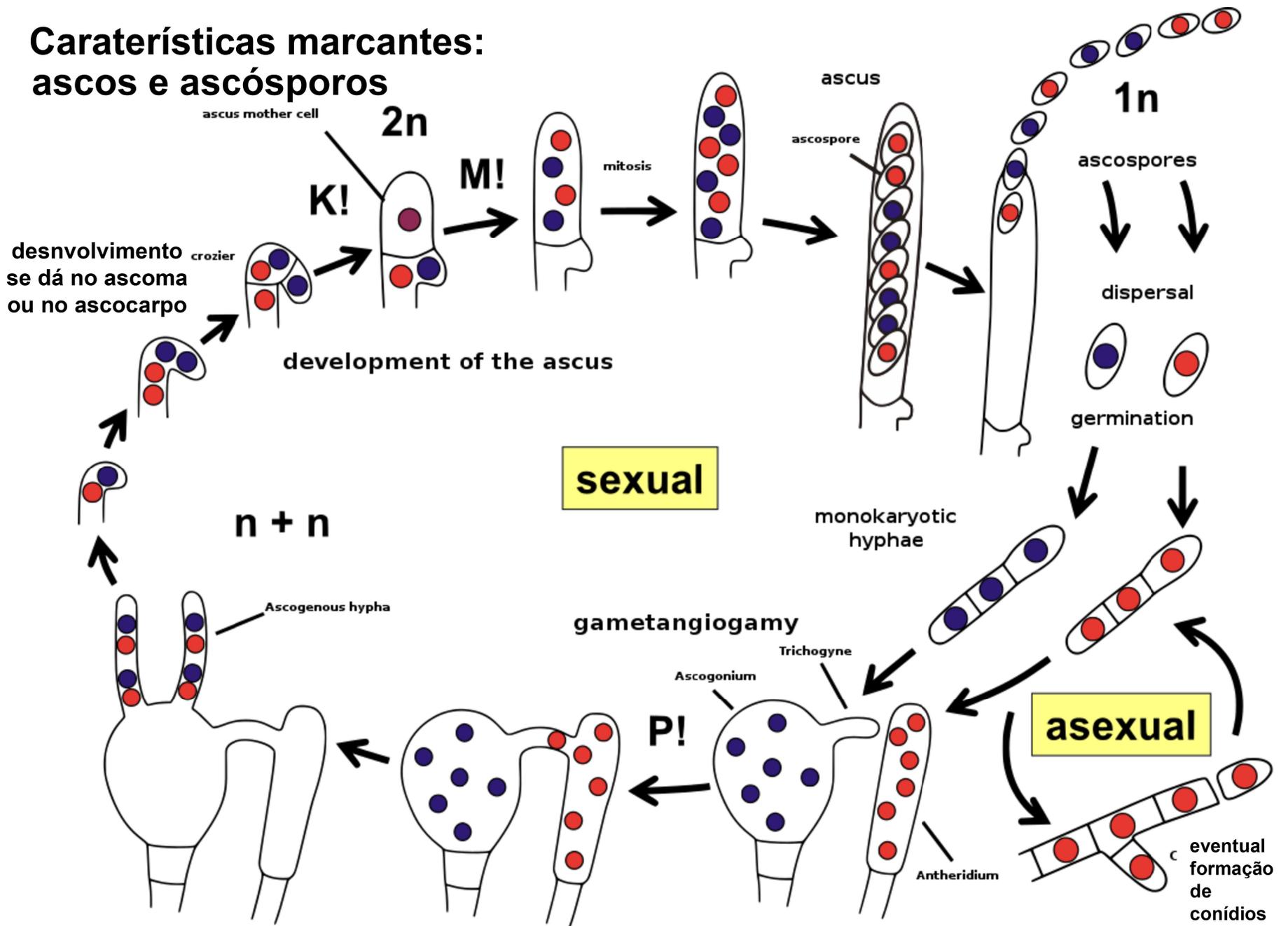
Diferentes tipos de ascos



conjuntos de ascos

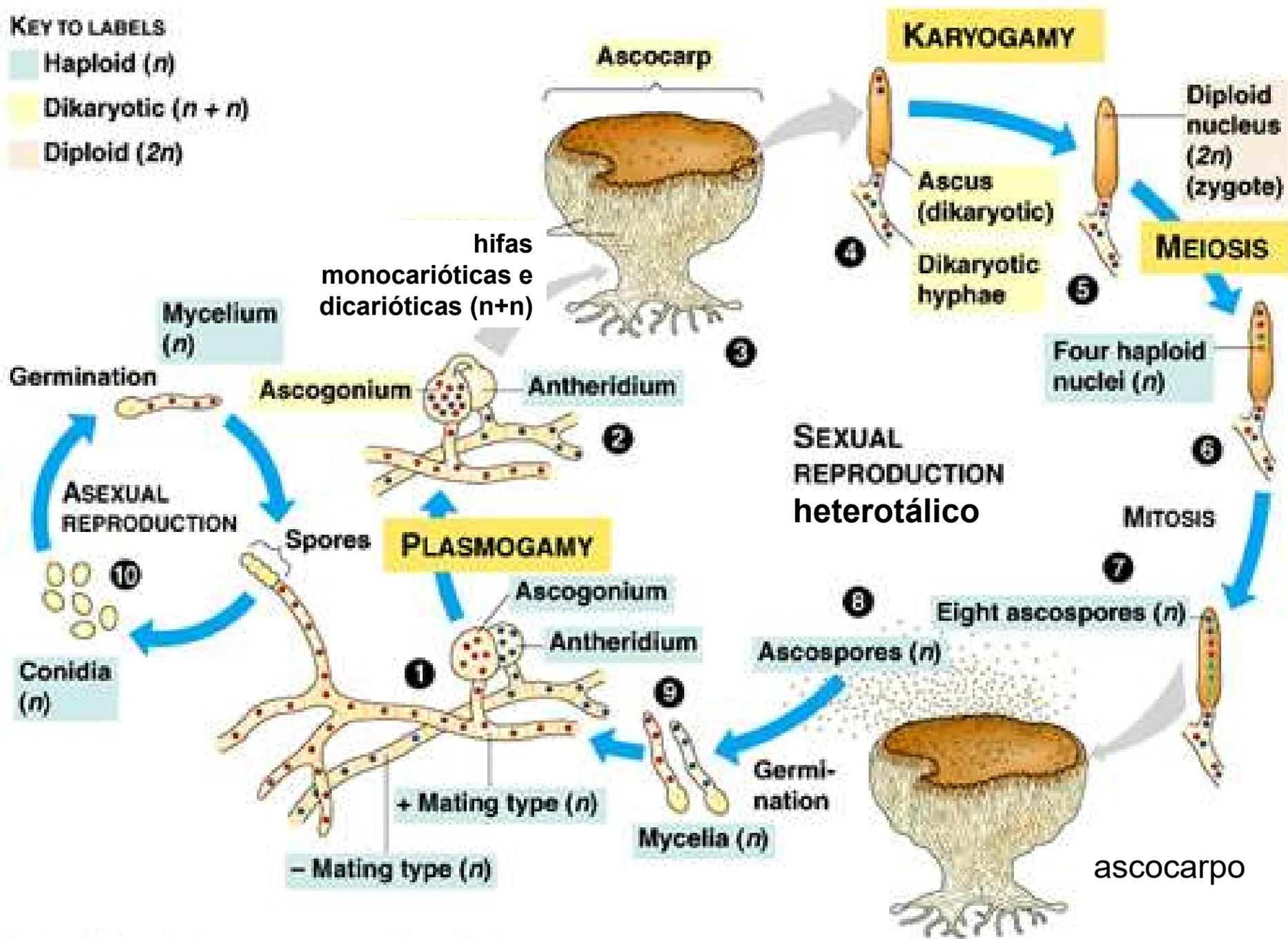


Caraterísticas marcantes: ascos e ascósporos



KEY TO LABELS

- Haploid (n)
- Dikaryotic ($n + n$)
- Diploid ($2n$)

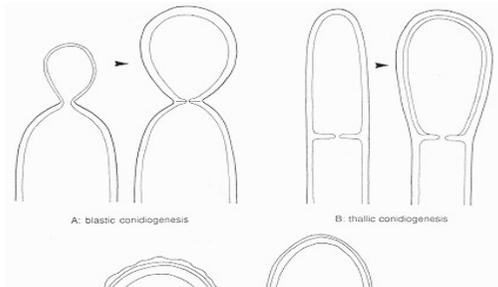


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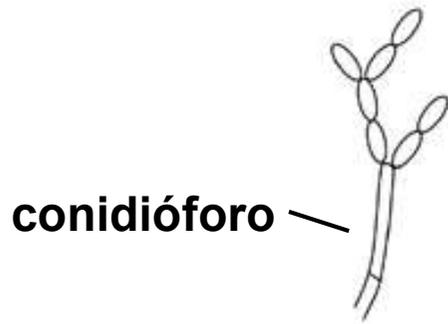
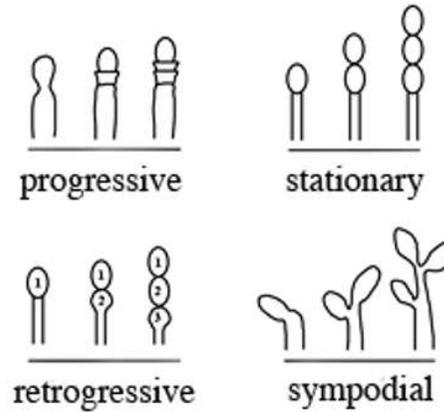
reprodução assexuada

conídios: esporos produzidos de forma assexuada (conidiogênese)

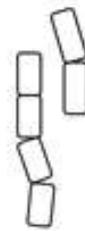
principal forma de dispersão do fungo



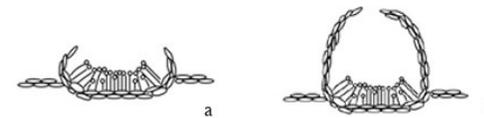
célula
conidiogênica



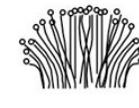
blástica



tálica



conidiomas



c

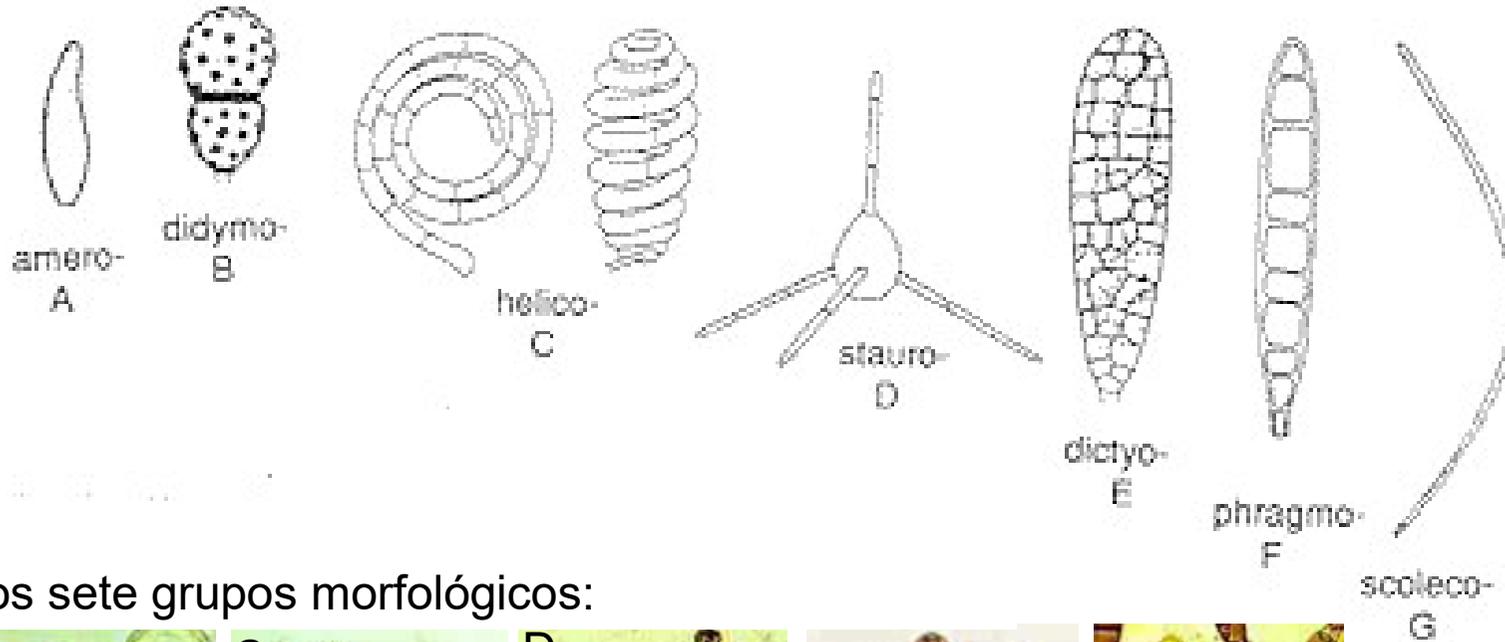
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Conídios

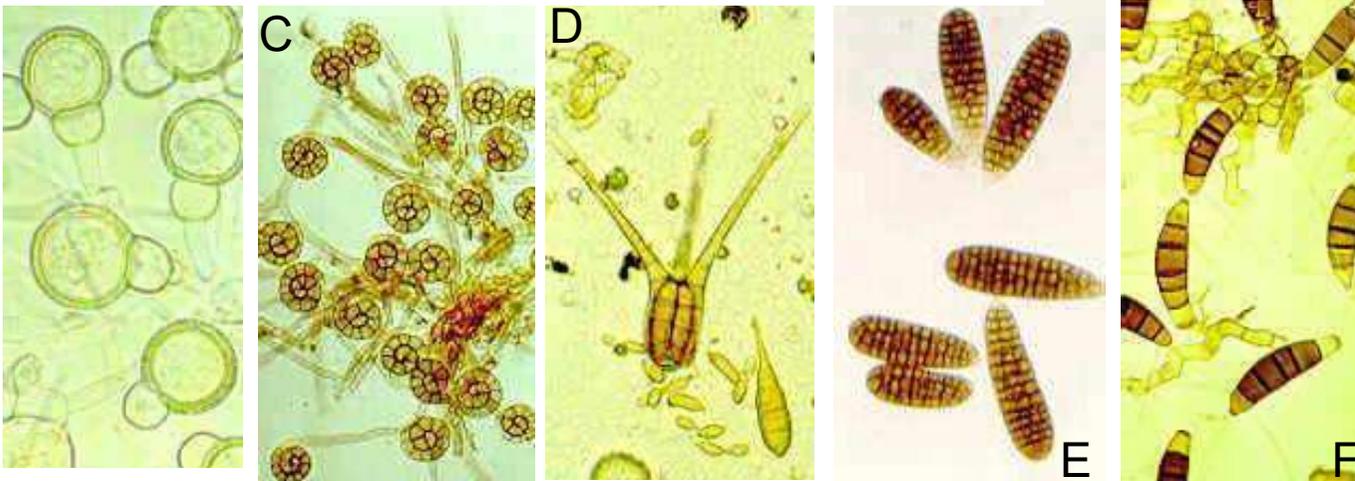
esporos – estruturas de resistência

dispersão:

- ar, água
- vetores animais



os sete grupos morfológicos:



Leveduras:

fungos unicelulares que se multiplicam por brotamento ou divisão

muitas vezes dimórficos

Candida albicans

