



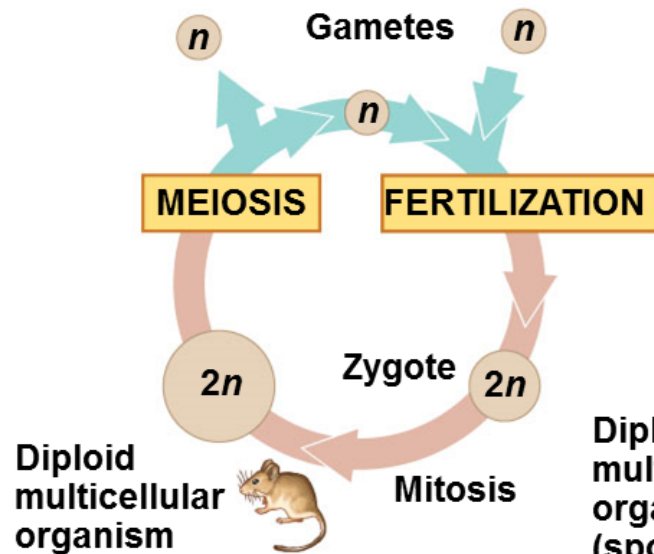
Sexuelle Reproduktionszyklen

Konzepte

Arten von sexuellen Lebenszyklen

Key

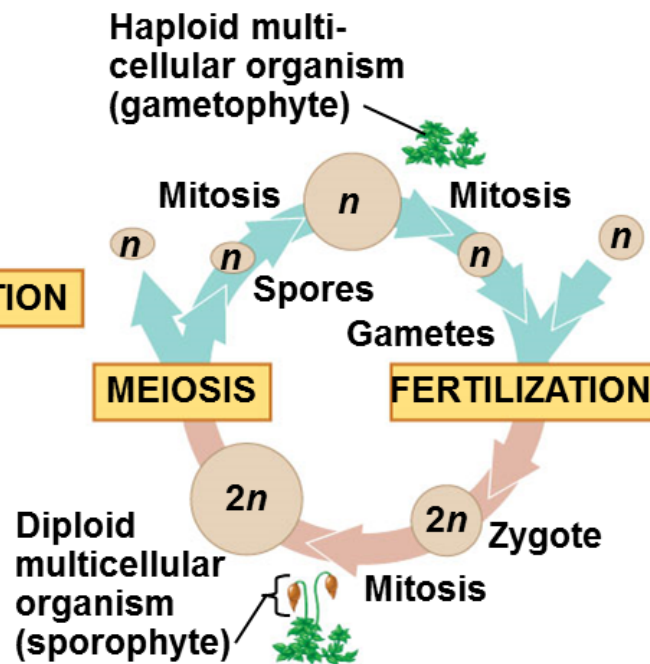
-  Haploid (n)
 Diploid ($2n$)



(a) Animals

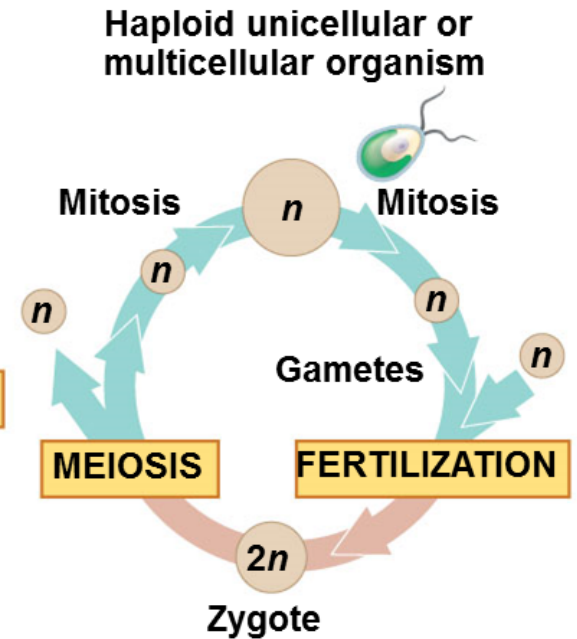
© 2011 Pearson Education, Inc.

Diplont



(b) Plants and some algae

Haplo-Diplont



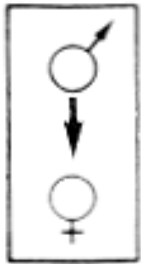
(c) Most fungi and some protists

Haplont

Arten von sexuellen Reproduktionssystemen

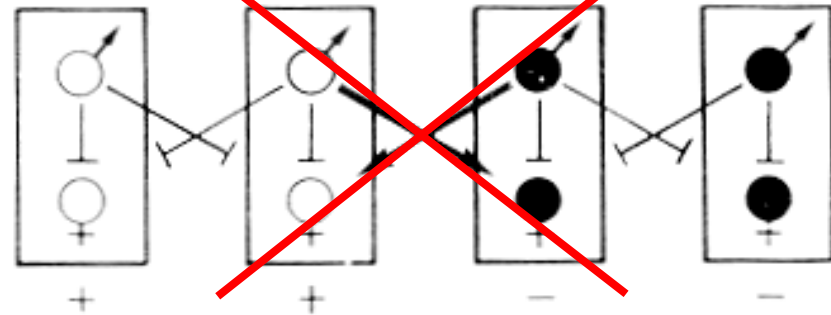
Monözie

compatibel



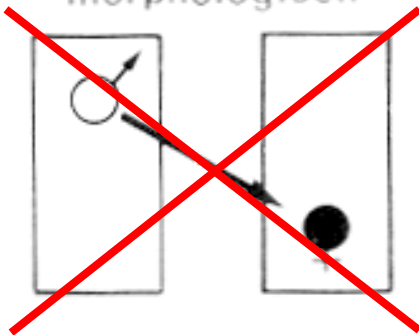
homothallisch

incompatibel

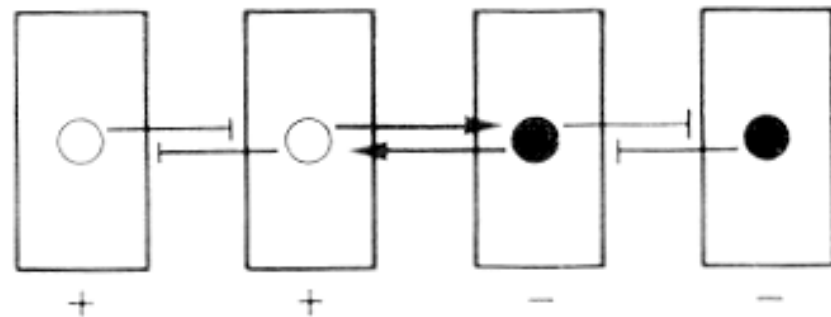


Diözie

morphologisch

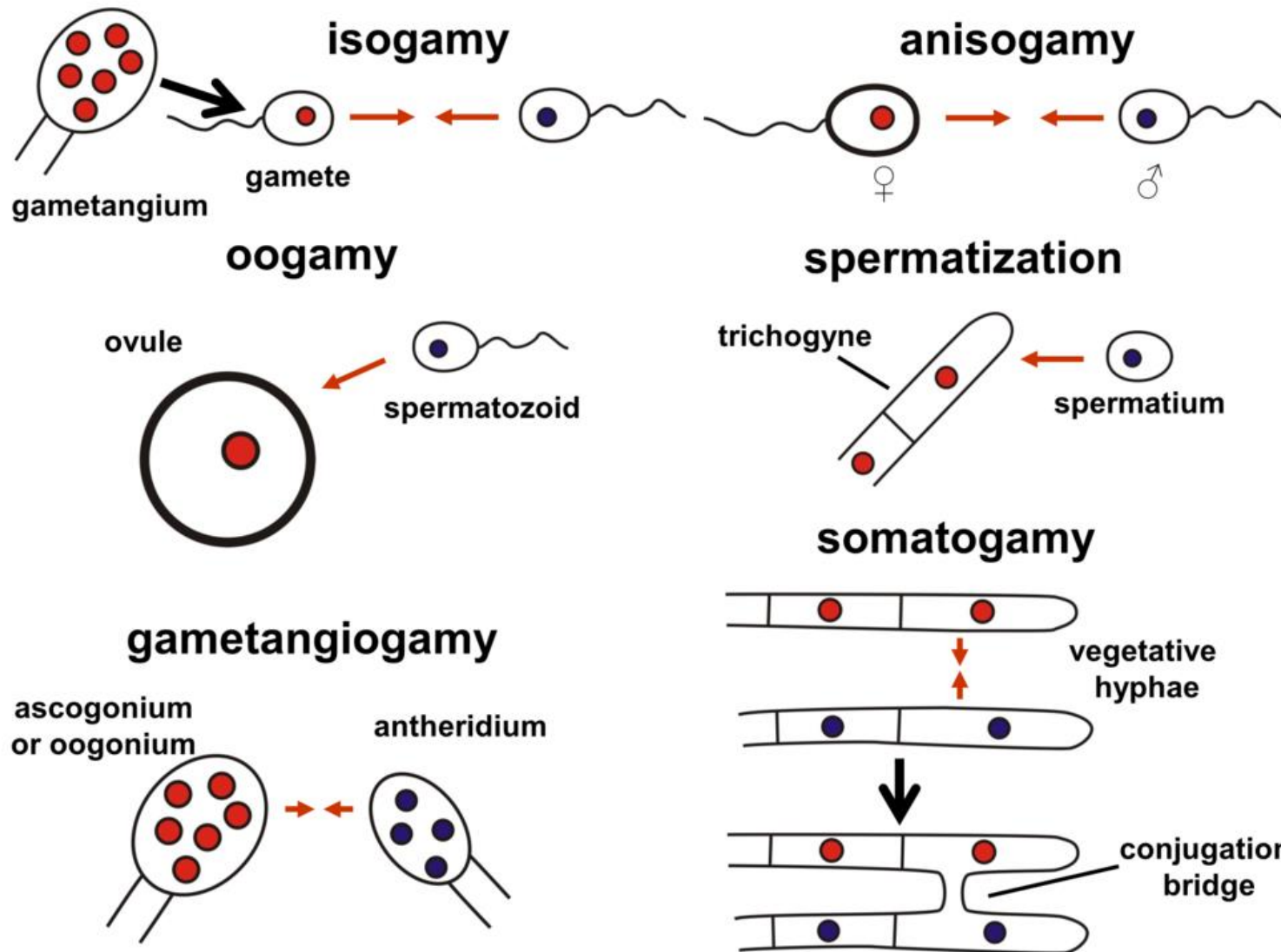


physiologisch (genetisch)

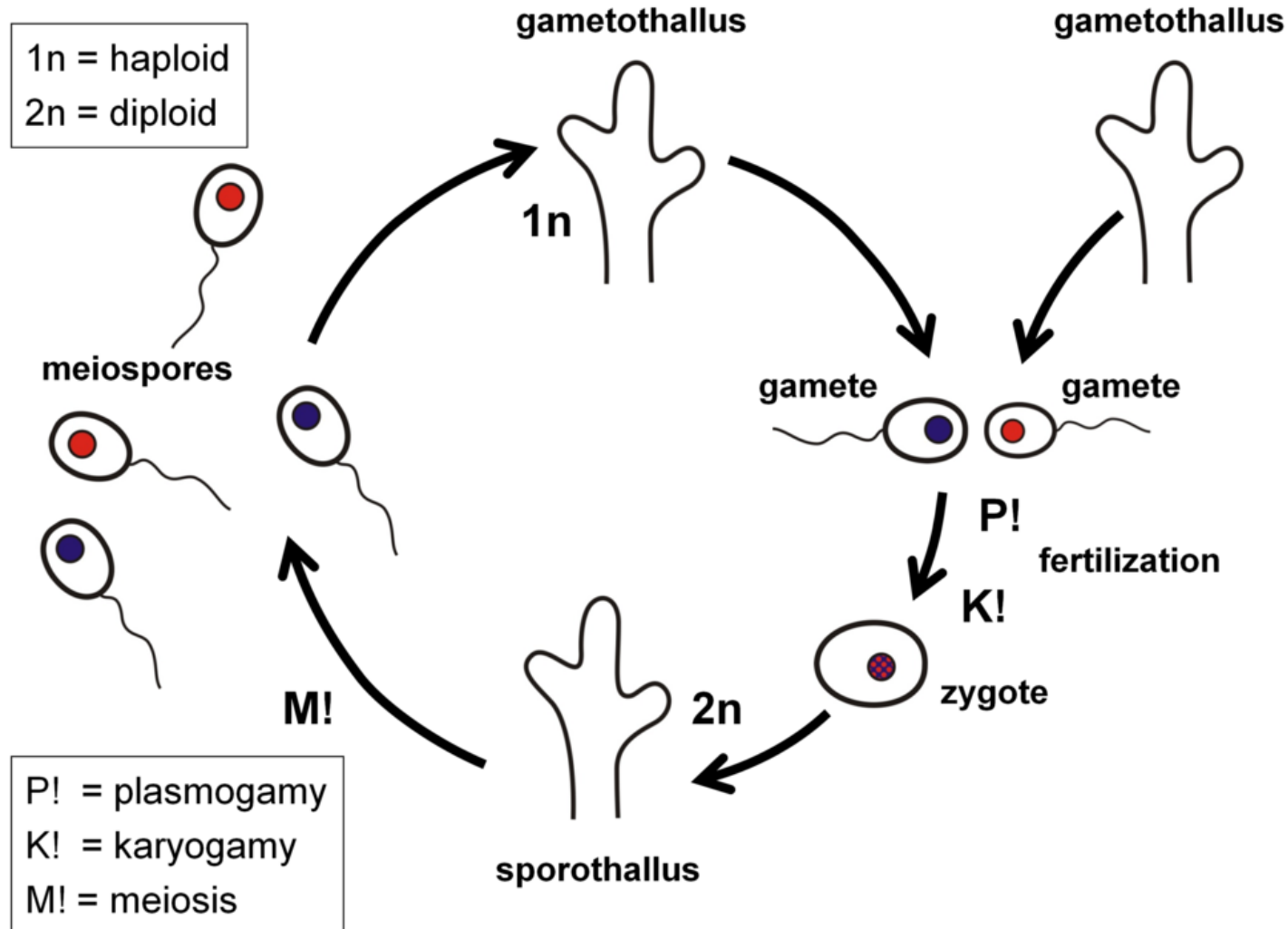


heterothallisch

Befruchtungsmodi bei Pilzen



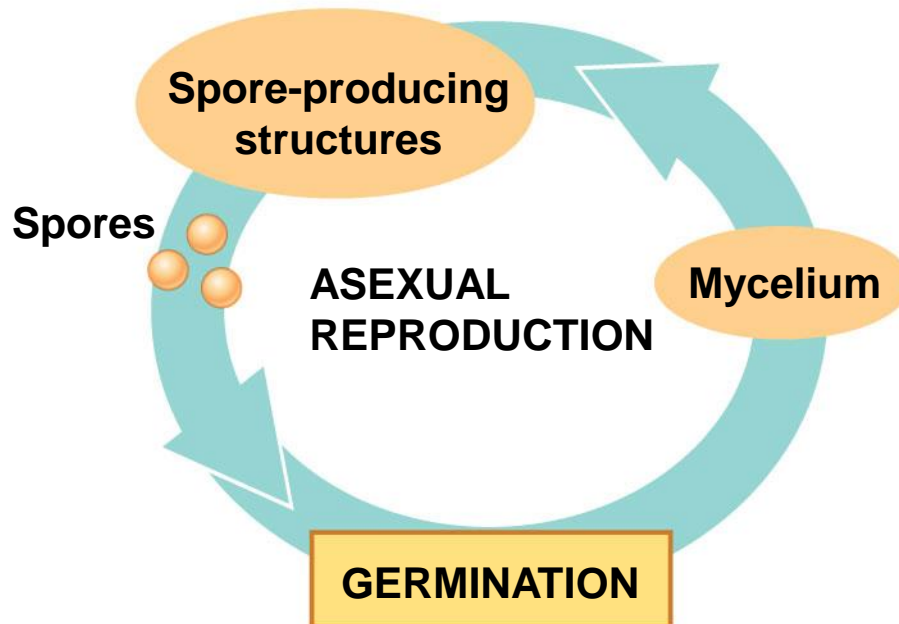
Beispiel: Sexueller Lebenszyklus eines isogamen und heterothallischen Pilzes



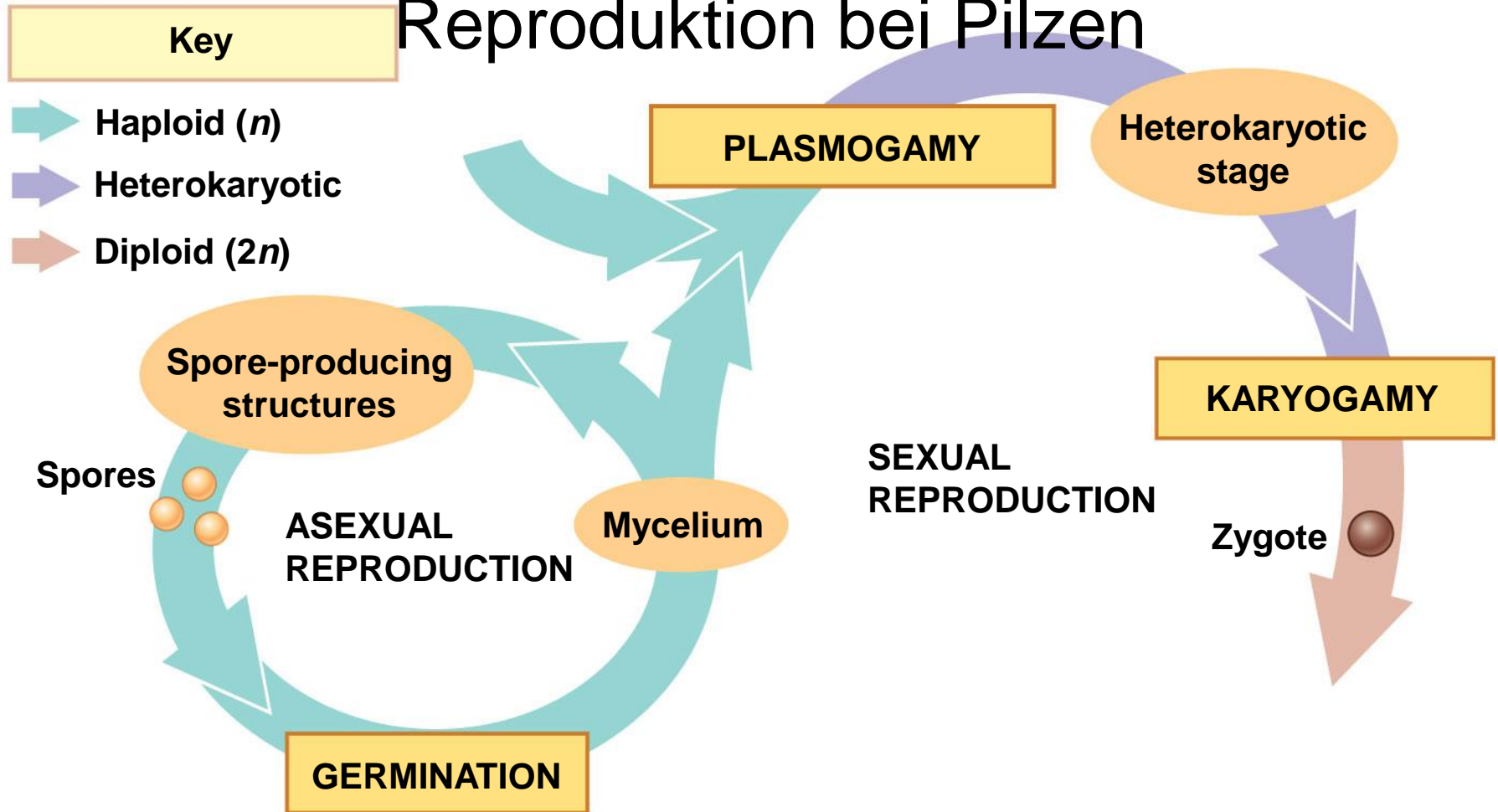
Kopplung von asexueller und sexueller Reproduktion bei Pilzen

Key

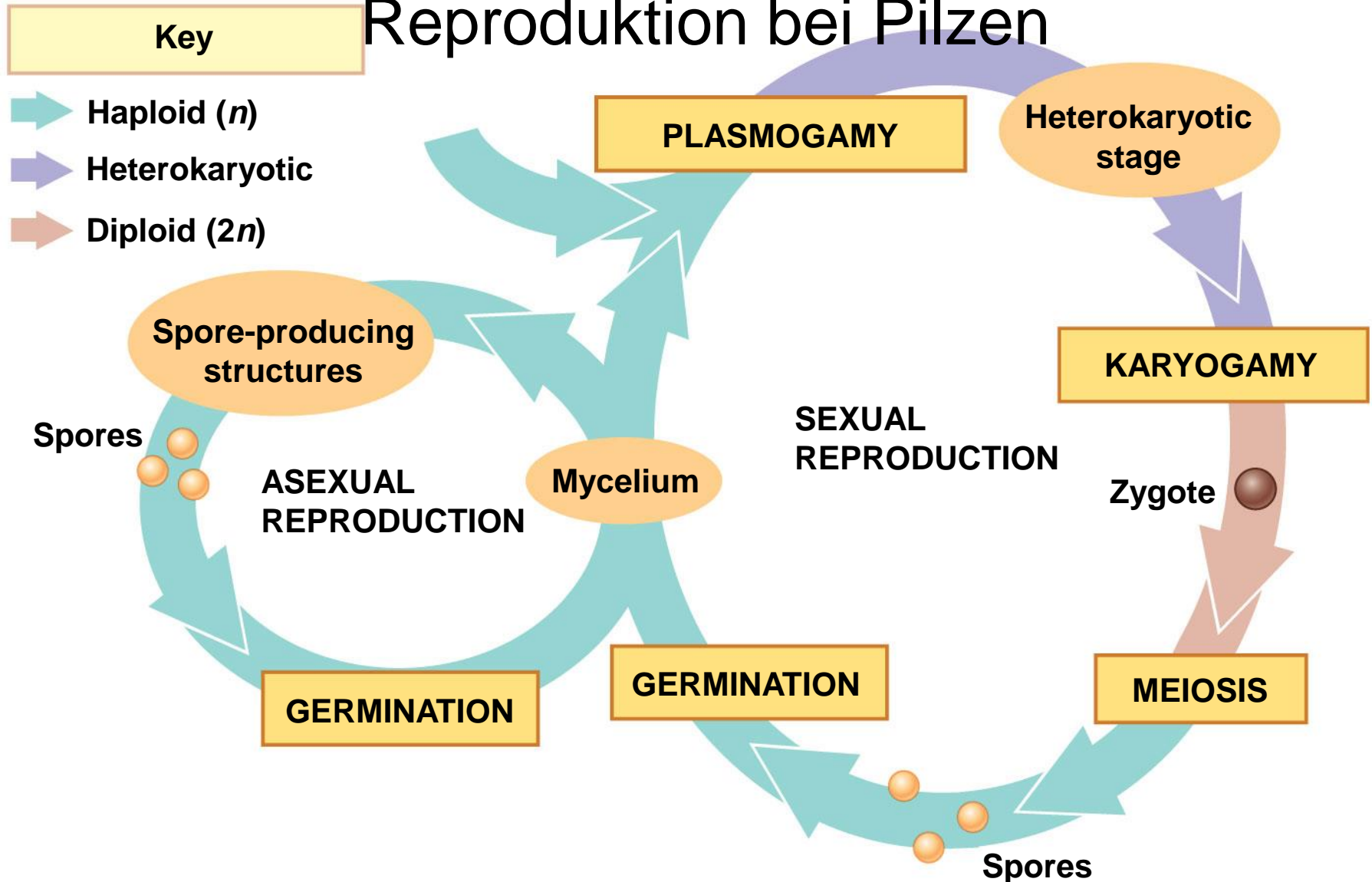
- ➡ Haploid (n)
- ➡ Heterokaryotic
- ➡ Diploid ($2n$)



Kopplung von asexueller und sexueller Reproduktion bei Pilzen

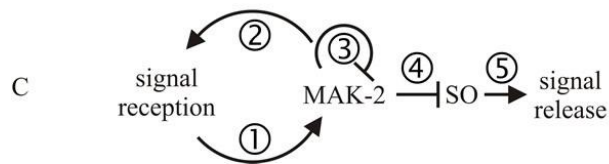
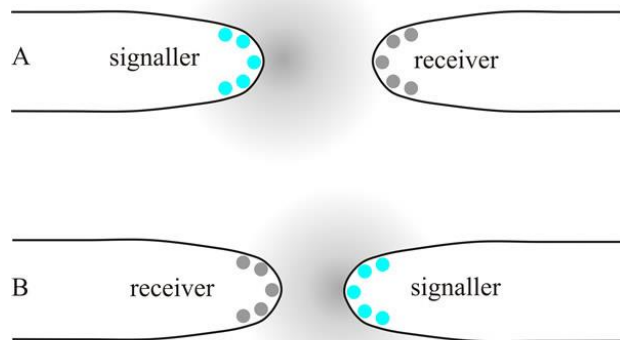
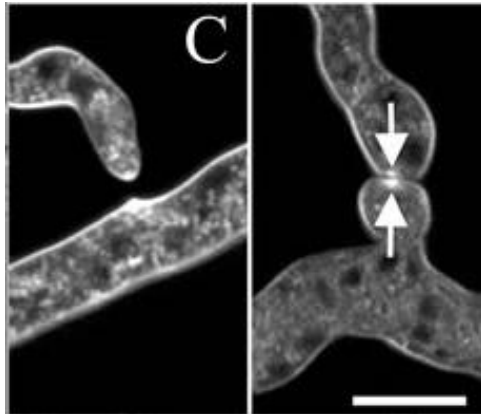


Kopplung von asexueller und sexueller Reproduktion bei Pilzen



Zwei Arten von Anastomosen (Plasmogamie)

Neurospora crassa

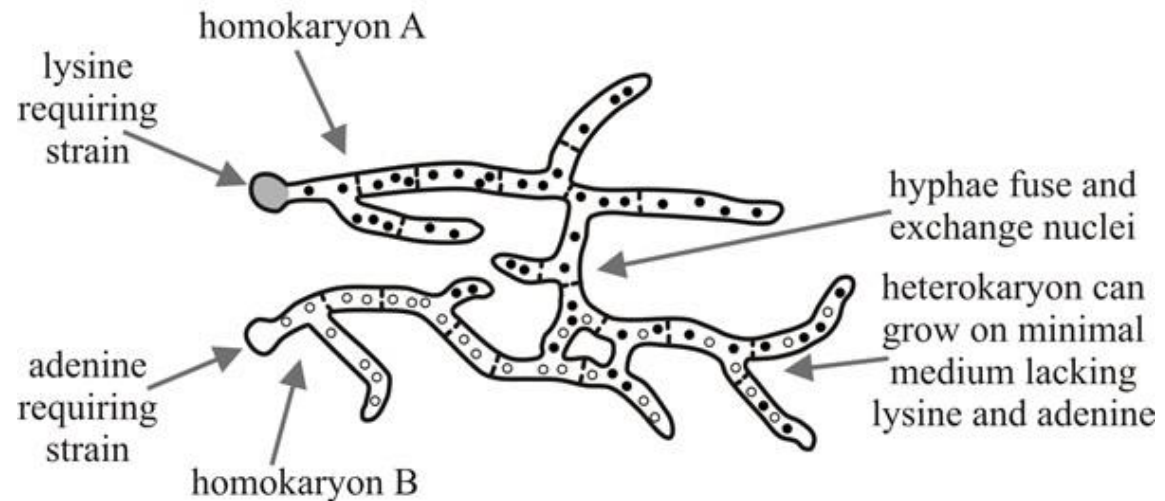
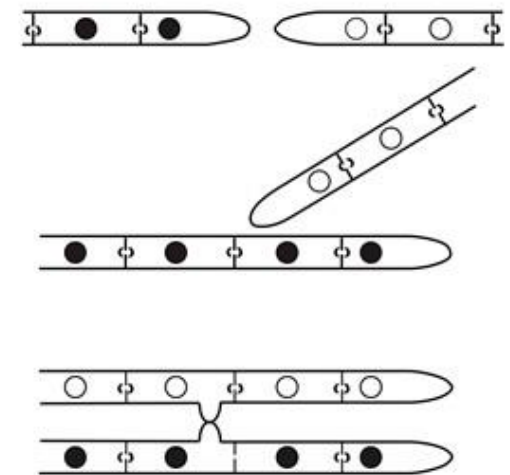


Moore Fig. 5-12 und 5-13

Aspergillus nidulans

Hyphal fusion occurs irrespective of the mating type specificities of the interacting hyphae.

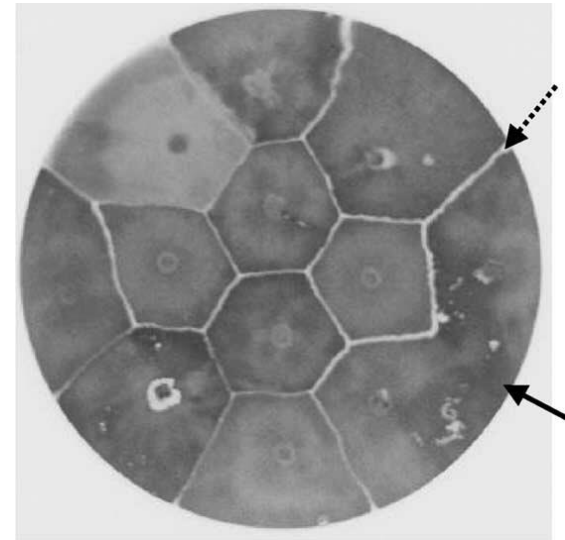
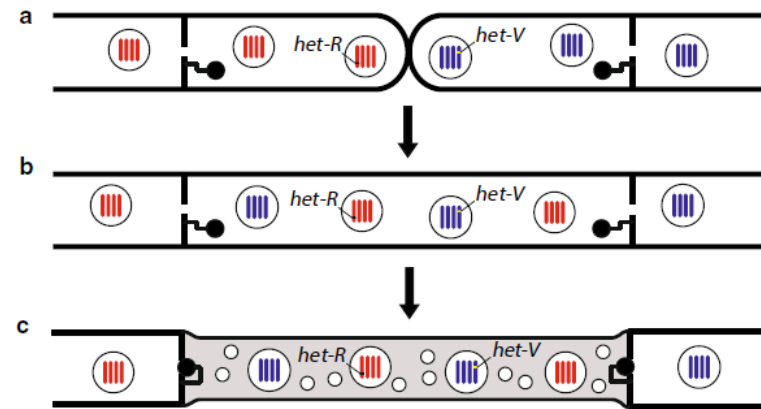
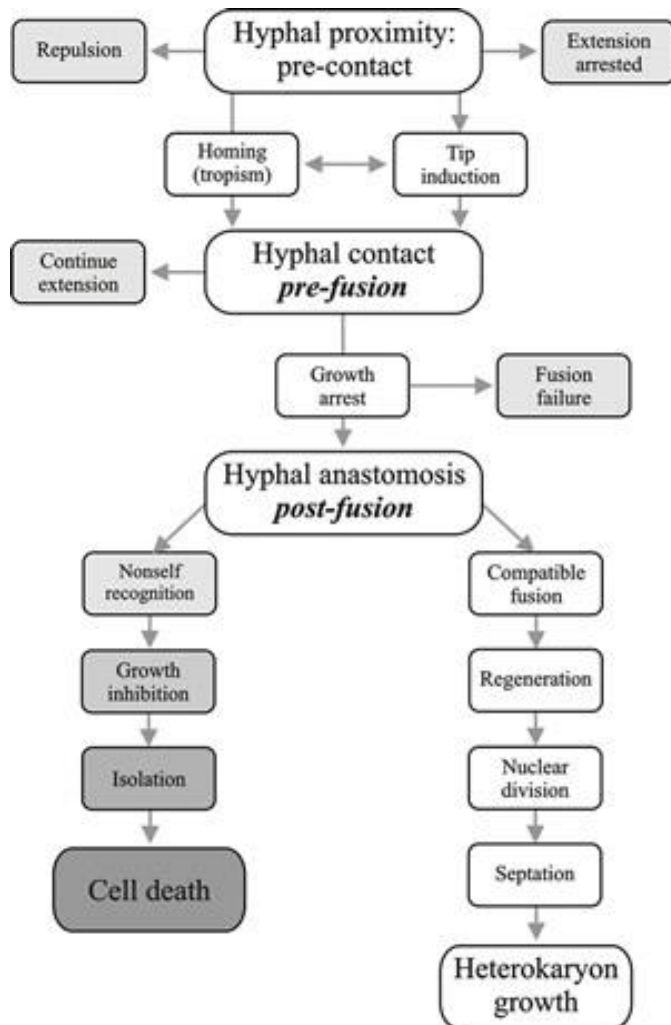
Fusions might occur tip-to-tip, tip-to-side or side-to-side (by tip induction and outgrowth of peg-like branches).



Moore Fig. 7-2

Konsequenzen von Heterokaryosen

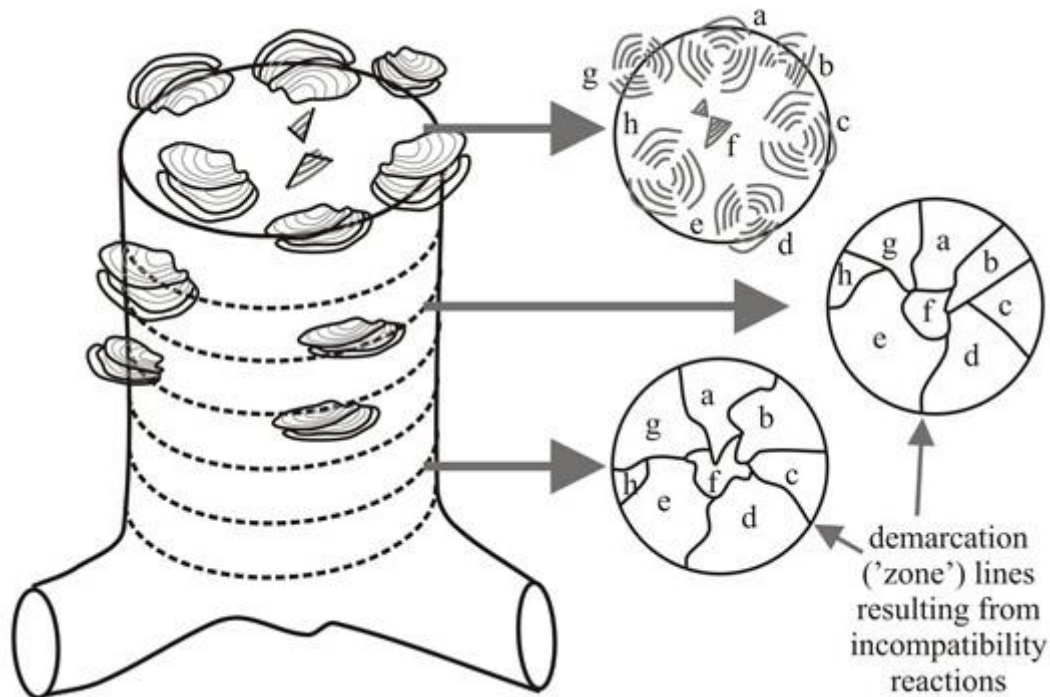
Vegetative Inkompatibilität als Kontrollmechanismus der Parasexualität



Podospira anserina

Konsequenzen von Heterokaryosen

Vegetative Inkompatibilität als Kontrollmechanismus der Parasexualität

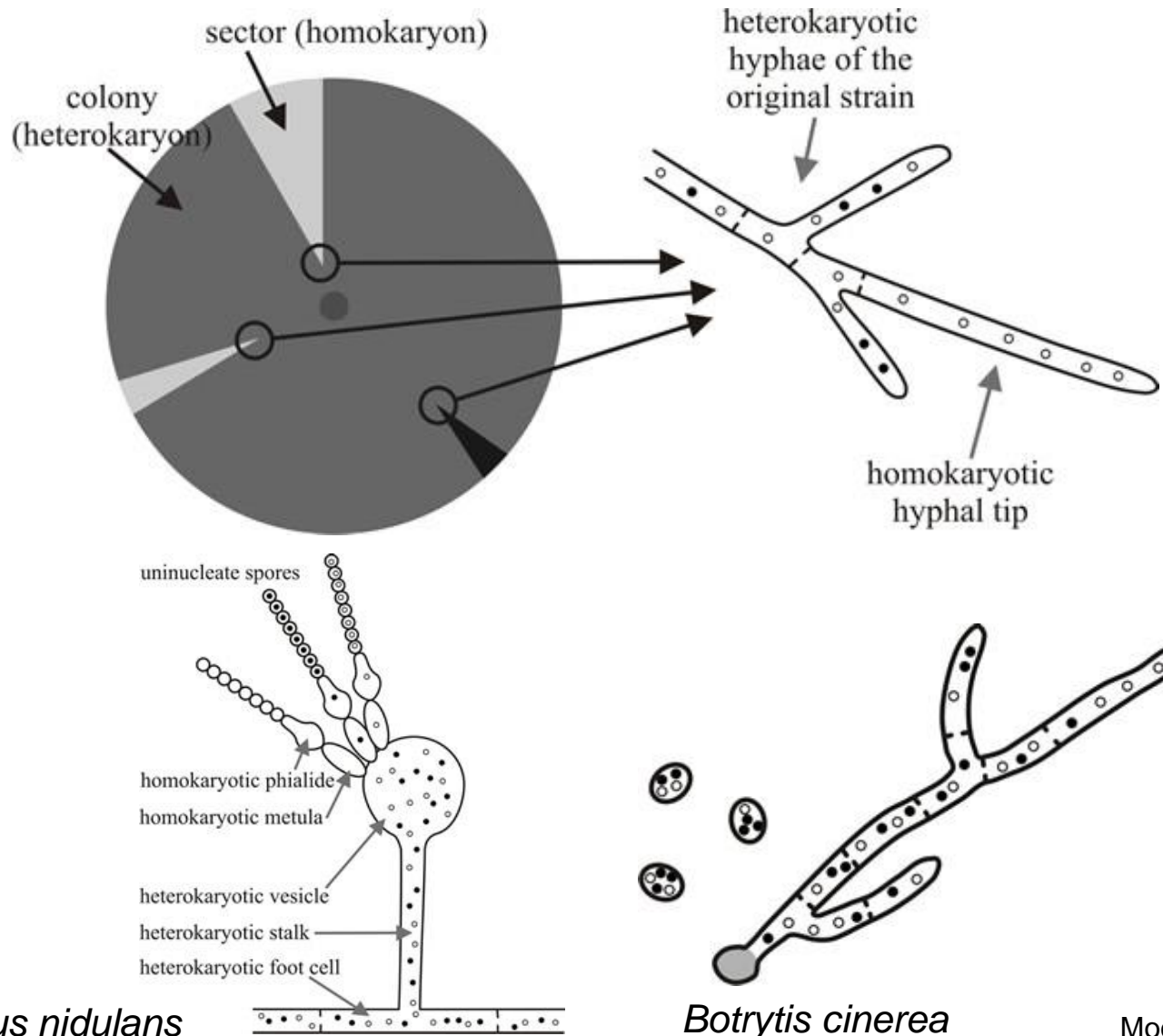


Moore Fig. 7-8

Innerspezifische Barragen von holzabbauenden Basidiomycota

Konsequenzen von Heterokaryosen

Phänomene vegetativer Kompatibilität (Parasexualität)

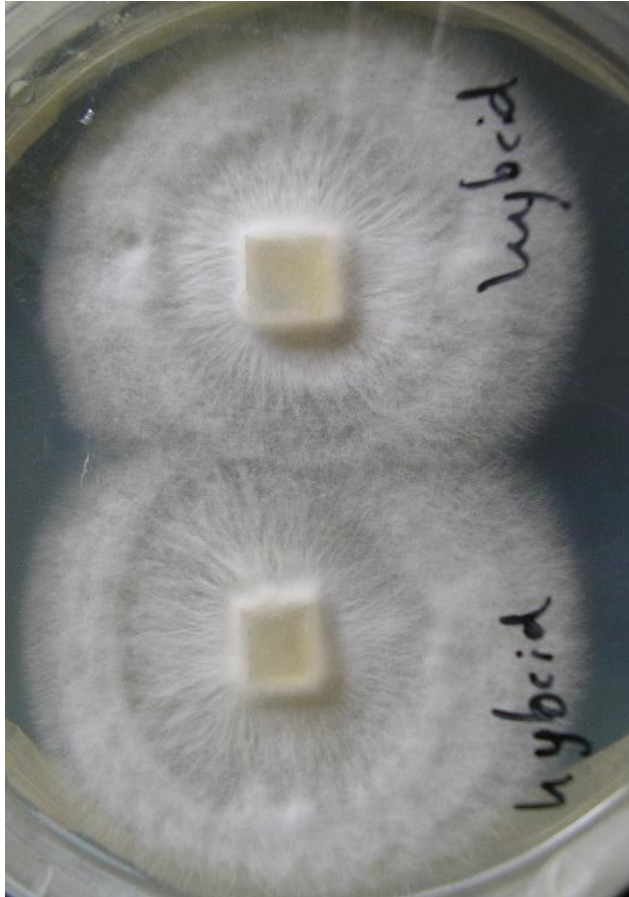


Aspergillus nidulans

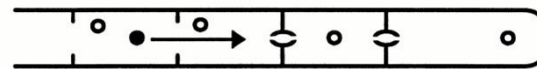
Botrytis cinerea

Konsequenzen von Heterokaryosen

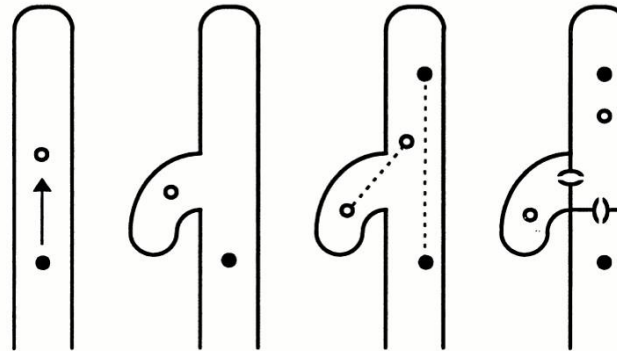
Stabilisierung als Dikaryon im Rahmen des sexuellen Zyklus (Sexualität)



Independent of Mating Type
Hyphal Fusion



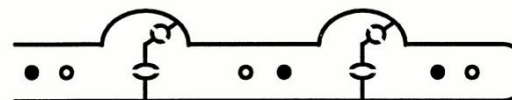
B Gene Control
Nuclear Migration
Septal Dissolution



A Gene Control
Nuclear Pairing
Clamp Cell Formation
Co-ordinate Nuclear Division
Clamp Cell Septation



B Gene Control
Clamp Cell Fusion



A and B Gene Control
Maintenance of the Dikaryon

Coprinopsis cinerea

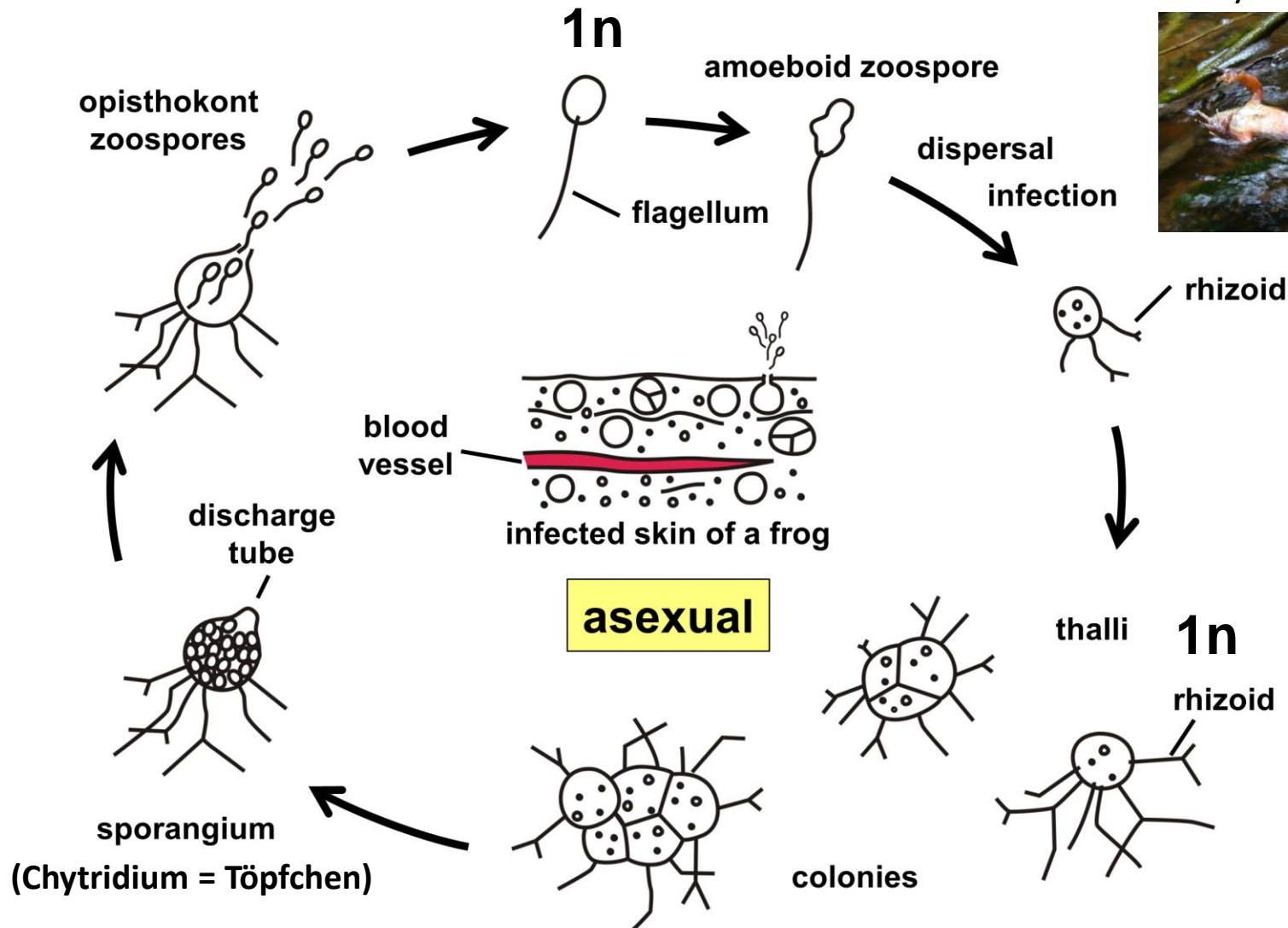
Casselton and Olesnick, 1998

Sexuelle Reproduktionszyklen

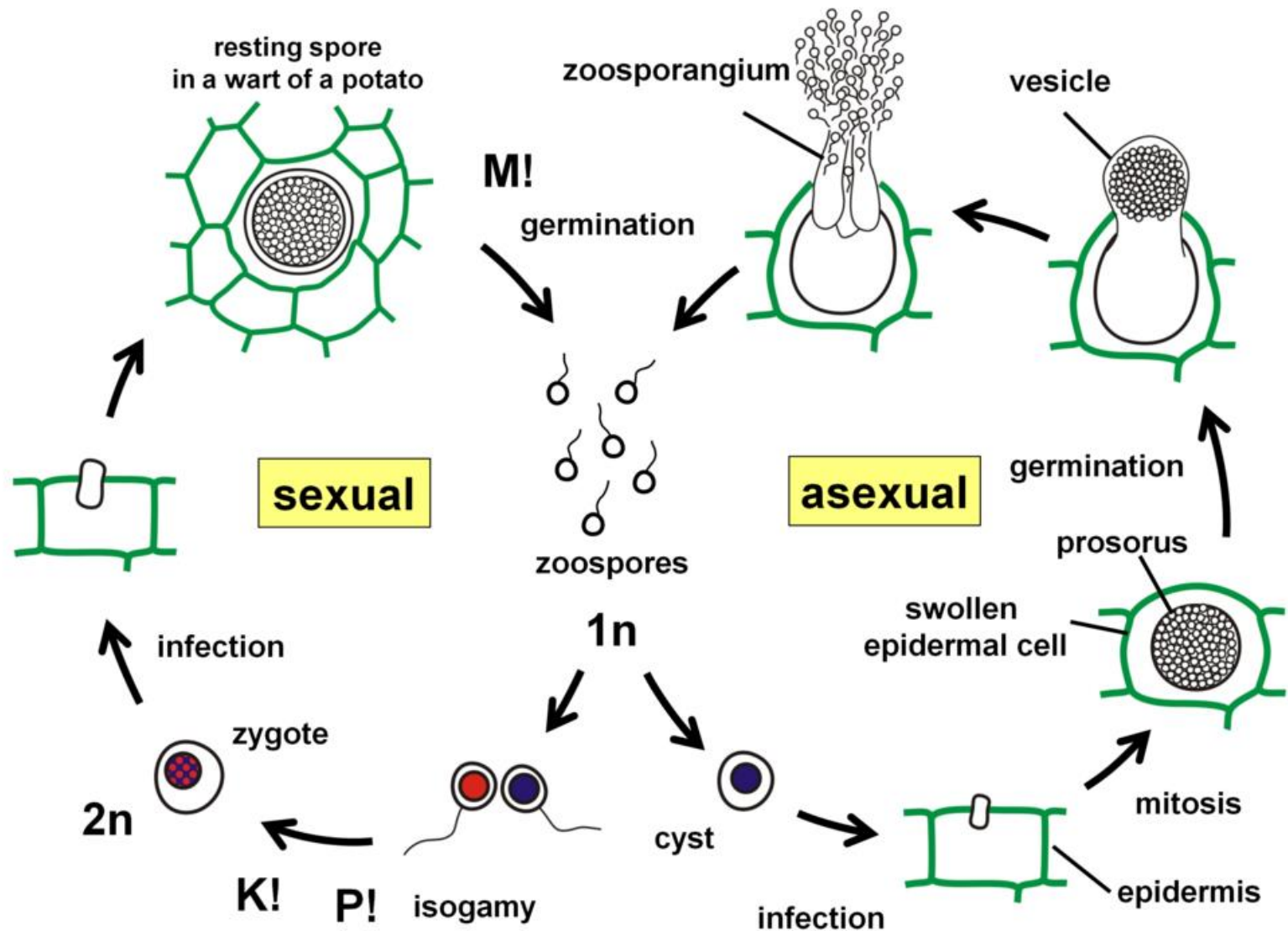
Chytridiomycota

Lebenszyklus von *Batrachochytrium dendrobatidis*

Chytridiomykose

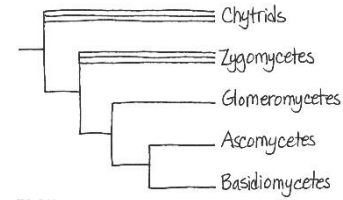


Lebenszyklus von *Synchytrium endobioticum*



Lebenszyklus von *Allomyces macrogynus*

(Blastocladiomycota)



Campbell Fig. 31.09

