



UNIVERSITÀ
DEGLI STUDI DI BARI
ALDO MORO

MYCOLOGY

SHORT MASTER



TASSONOMIA ED IDENTIFICAZIONE DEGLI ASCOMICETI

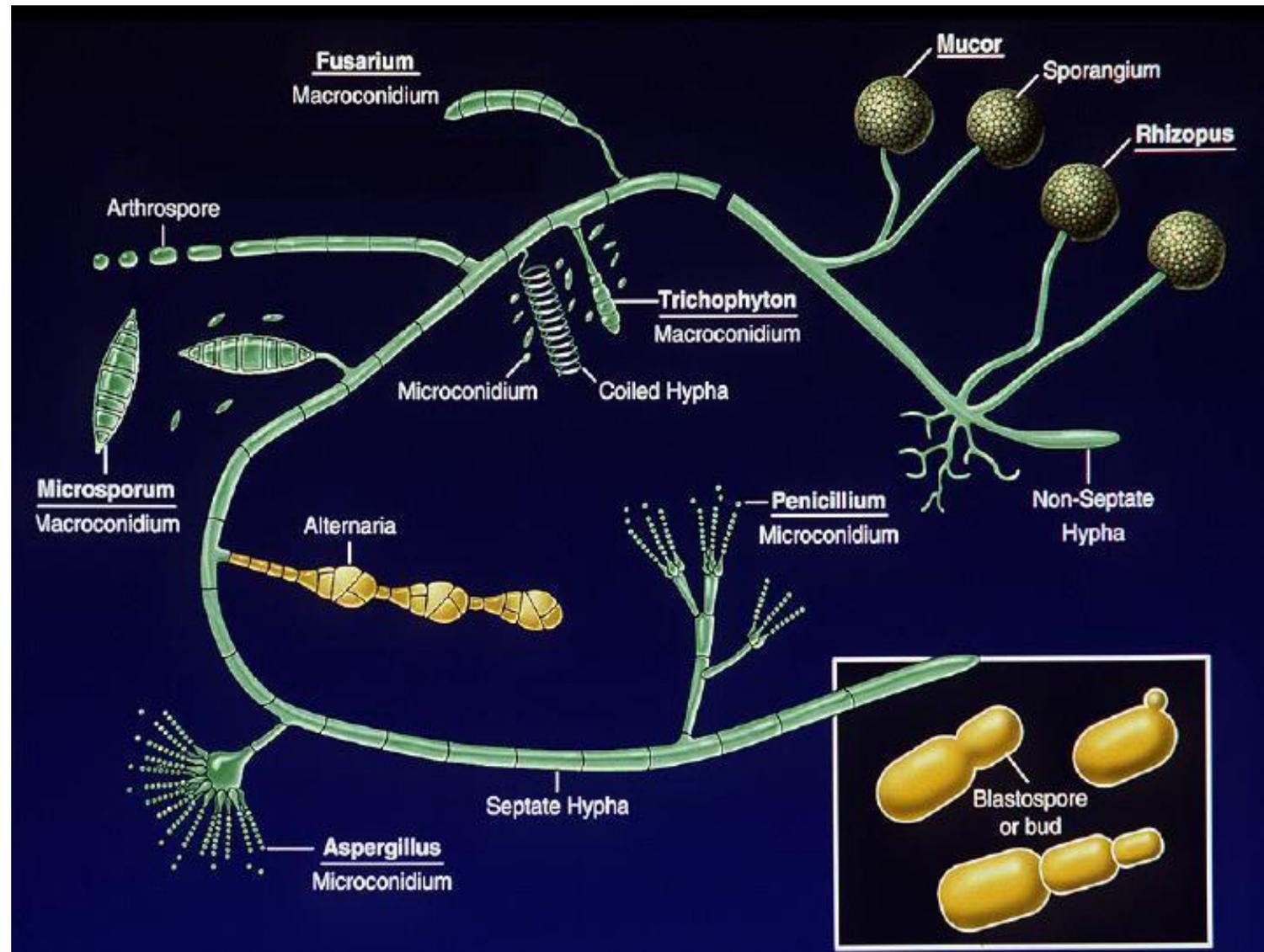
*Claudia Cafarchia, Dipartimento di Medicina
Veterinaria, Università degli Studi di Bari Aldo
Moro.*

DIPARTIMENTO
MEDICINA
VETERINARIA



ASCOMICETI

TUTTI I FUNGHI
FILAMENTOSI

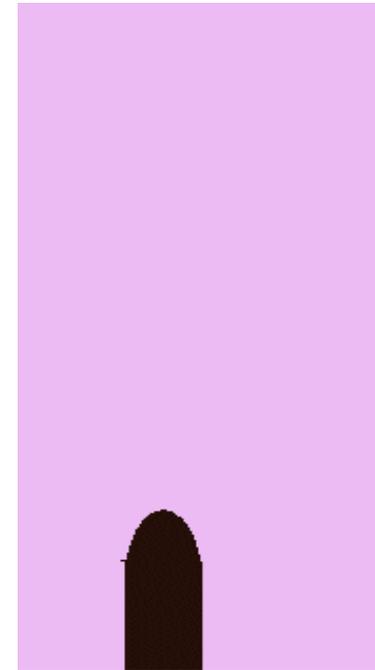


ASCOMICETI

- MICELIO SETTATO
- ASCOSPORA
- CONIDI PRODOTTI DA IFE



ASCOMICETI CONIDIOGENESI



Birth:

blastic

locus

thallic

conversion

Wall:

holoblastic

enteroblastic

holothallic

holoarthric

enteroarthric

Order:

synchronous

sympodial

phialidic

annelidic

Arrangement:

just one

catenate

clump

cat

clump

cat

basipetal

Liberation:

schizo

rhexo

schizo

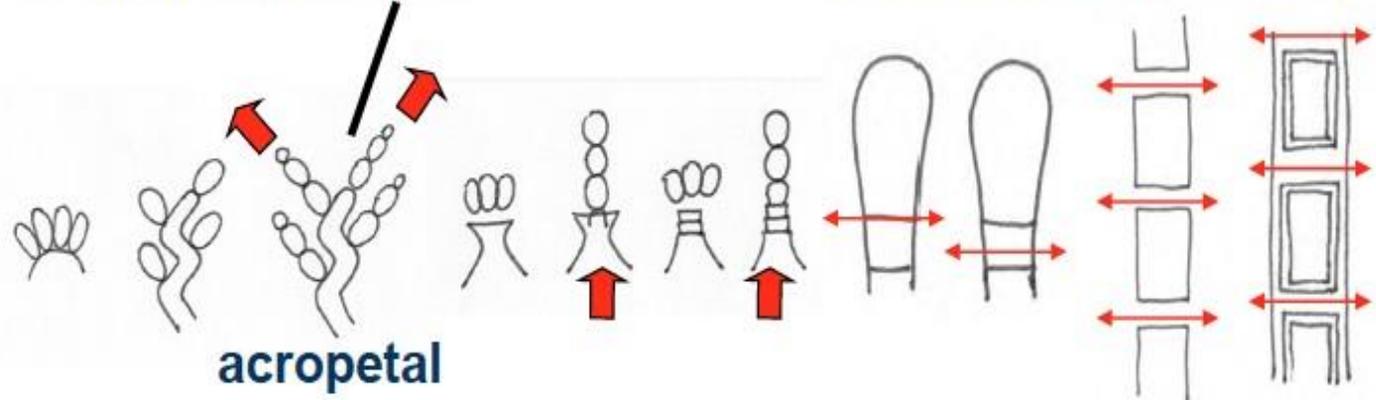
schizo

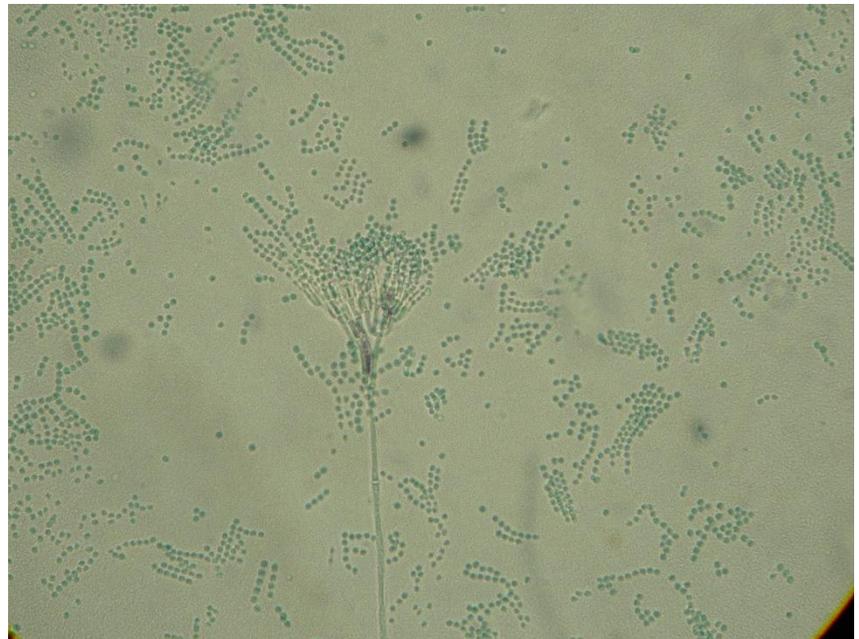
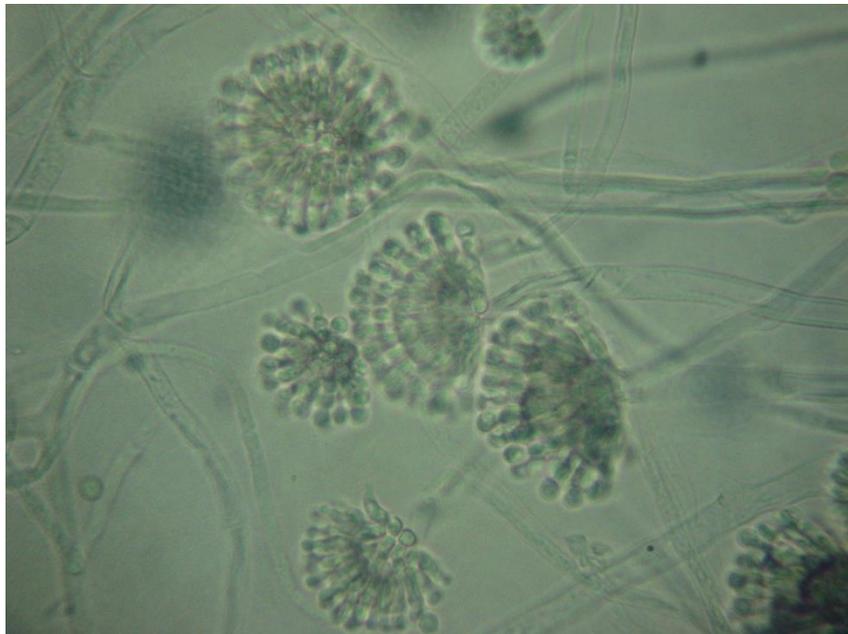
schizo

rhexo

schizo

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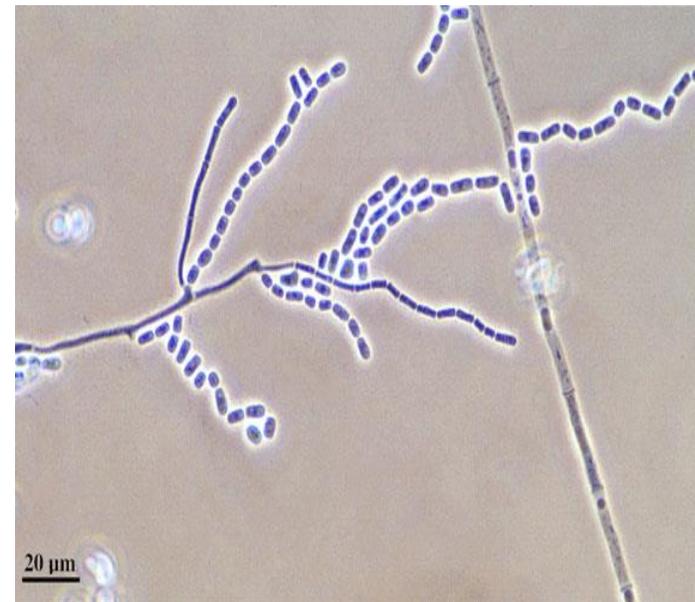


ASCOMICETI CONIDIO TALLICO

ALEURIOCONIDI



ARTROCONIDI



ASCOMICETI CONIDIO TALLICO

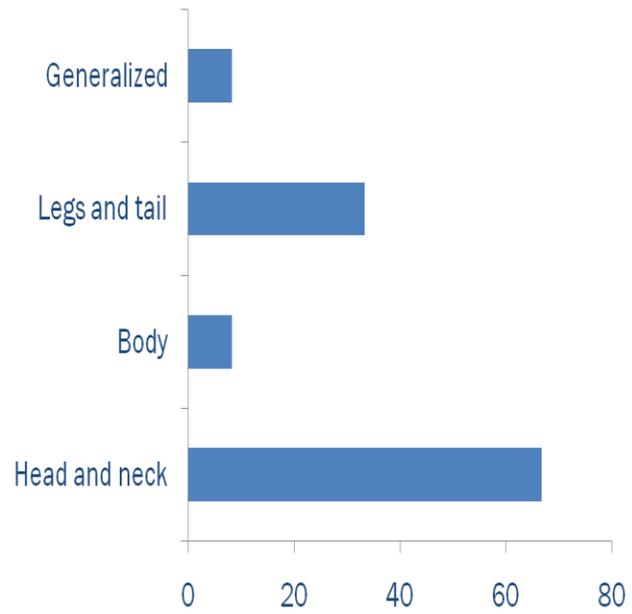
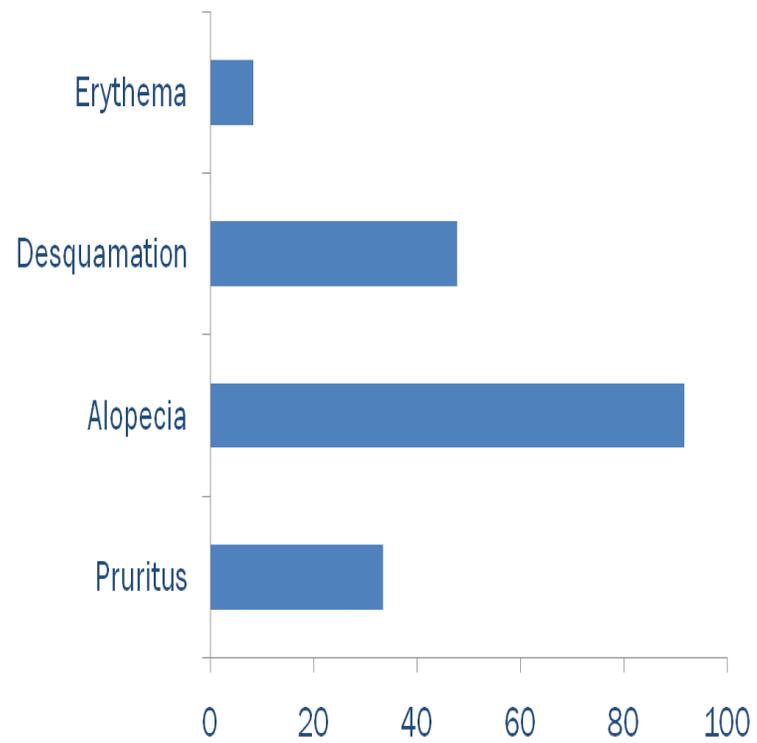
Genere: *Geotrichum*.

Specie: *Geotrichum candidum*

G.candidum è un grave patogeno per gli agrumi durante il loro stoccaggio, limoni e pompelmi sono le specie più sensibili al suo attacco.

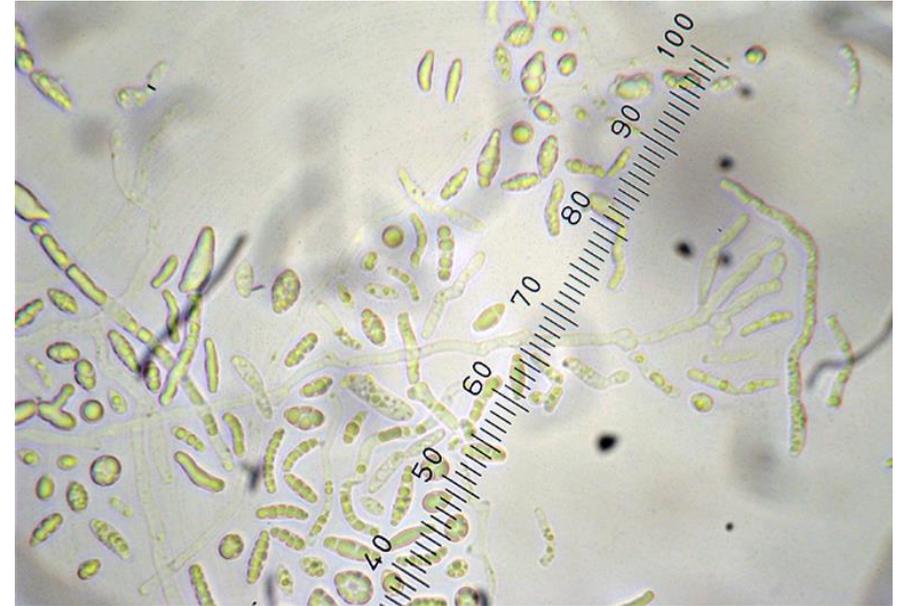
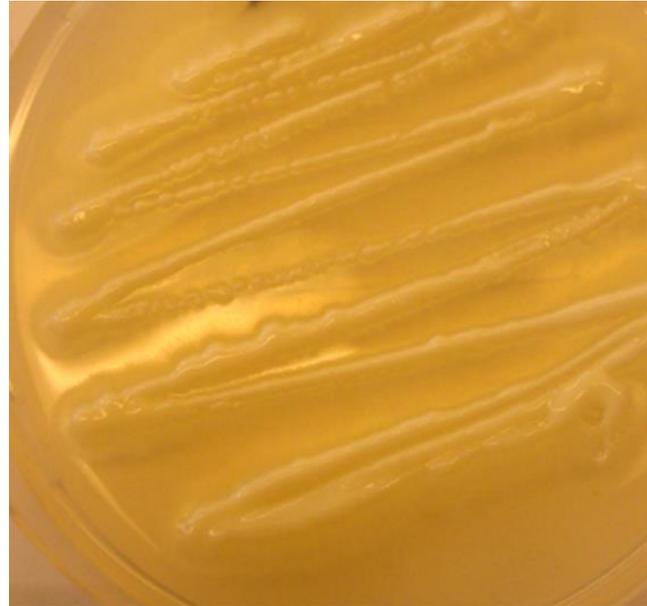
Essa contribuisce un problema anche nell'industria conserviera, dove si inserisce nelle linee di produzione, per cui le è stato conferito il nome di "muffa dei macchinari".



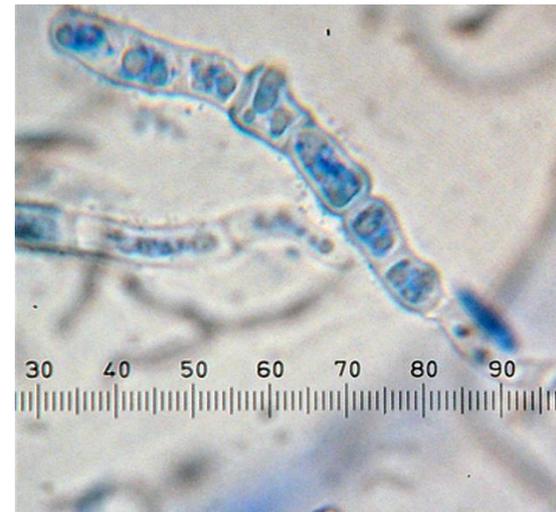
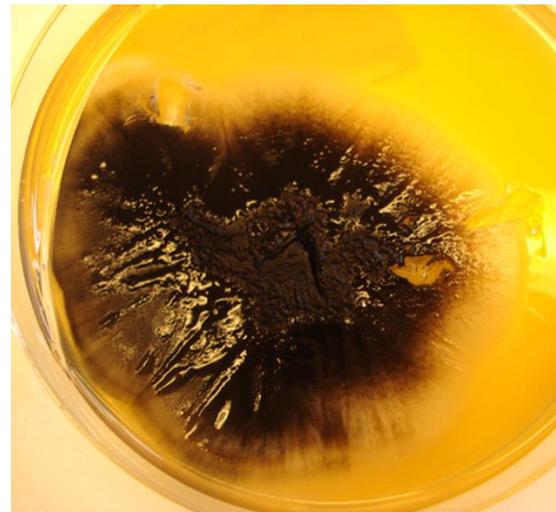


ASCOMICETI CONIDIO TALLICO

Trichosporon mucoide



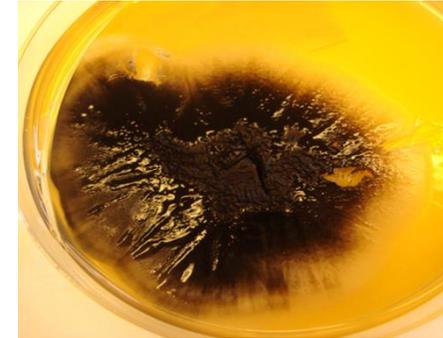
Aureobasidium pullulans



ASCOMICETI CONIDIO TALLICO

Table 2. Summary of case reports of bloodstream infections with *A. pullulans*

Author, year, reference	Source	Age, Sex	Comorbidities	Clinical background and sample collection	Final identification method	Treatment	Outcome
Mehta <i>et al.</i> (2017) [5]	Hickman catheter	66, M	-Single kidney -TPN-dependent -Chron's Disease	Presented with weeks of fever and isolated <i>Staphylococcus</i> bacteraemia initially; repeat cultures were collected through the patient's catheter	-MALDI-TOF -DNA sequencing	Micafungin; amphotericin B	Survived
Huang <i>et al.</i> (2008) [1] (Case 1)	CVC	61, F	-Hepatocellular carcinoma	Presented with altered mental status and found to have intracranial metastatic disease; had 26-day admission with CVC in place and developed fever; catheter tip and blood cultures drawn initially identified <i>Cryptococcus laurentii</i> until black colonies were seen on culture plates	-Fluorescence-based technology in combination with culture characteristics	Catheter removal	Survived
Huang <i>et al.</i> (2008) [1] (Case 2)	CVC	54, F	-Pleural cutaneous fistula -Empyema -Oesophageal fistula	Presented for complicated empyema; 54 days into admission had a fever and catheter site had erythema present; fungal blood cultures and catheter tip were sent for culture	-ITS sequencing	Amphotericin B; fluconazole	Survived
Girardi <i>et al.</i> (1993) [10]	CVC	53, F	-Stage 3 ovarian cancer -TPN-dependent	Presented with fevers, blood cultures had Gram-negative organisms present; day 13 patient had fever but no erythema seen at the catheter site; cultures that were taken 5 days before this fever showed yeast identified as <i>Trichosporon</i> by biochemical testing; isolate was sent to the state lab for further testing	-Not specified	Amphotericin B	Died
van Houghouck-Tulleken <i>et al.</i> (2016) [7]	Septic arthritis	28, F	-AIDS (CD4 168)	Presented with 4-month history of oligoarthritis and rash, osteomyelitis found on images of the talus and tibia; cultures were taken of synovial fluid, blood and tissue specimens; organism was initially identified as <i>Cryptococcus neoformans</i> by colorimetric testing kits until repeat testing was done	-Phenotypic testing of synovial fluid -ITS sequencing of blood and synovial fluid	Amphotericin B; fluconazole	Survived
Bolignano <i>et al.</i> (2003) [2]	CVC, open wounds or SSI	28, M	-TPN-dependent -Prolonged intubation	Admitted after head trauma from car accident; owing to persistent fevers, repeat cultures were collected peripherally and from his CVC	-Culture growth and appearance characteristics	Fluconazole	Survived
Hawkes <i>et al.</i> (2005) [11]	CVC	4 months, M	-None	Mother presented in labour with complicated delivery and course with emergent cardiac surgery and cardiac collapse; patient had CVC in place and cultures sent from the catheter on day 86 and 92 of admission; tissue on autopsy was also sent from the pulmonary arteries	-Colony morphology and microscopic appearance	Amphotericin B	Died
Mershon-Shier <i>et al.</i> (2011) [12]	CVC	11, M	-Intestinal lymphangiectasis -Lymphopenia -Protein losing enteropathy	He was admitted with fever and concern for infection of his previously placed port; cultures collected from his CVC on admission were positive; catheter tip was later sent for culture and was negative	-Phenotypic testing	Amphotericin B	Survived
Joshi <i>et al.</i> (2010) [6]	CVC	11, M	-Bone Marrow transplant recipient	Admitted for second transplant and on day 0 developed skin rash and fevers; blood cultures were collected as well as skin biopsy and initial identification of the organism present was <i>Candida</i>	-Culture growth and appearance characteristics	Amphotericin B; voriconazole	Survived
Kaczmarek <i>et al.</i> (1986) [13]	Hickman catheter	28, M	-Acute myeloid leukaemia	Patient was undergoing induction chemotherapy when he developed fever and altered mental status; cultures were collected peripherally and from his Hickman catheter and sent to a reference lab for identification	-Not specified	Amphotericin B	Died



ASCOMICETI CONIDIO TALLICO



Invasive Trichosporon Infection: a Systematic Review on a Re-emerging Fungal Pathogen

João N. de Almeida Júnior^{1,2*} and Christophe Hennequin^{3,4,5}

¹ Central Laboratory Division-LIM03, Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil, ² Laboratory of Medical Mycology-LIM53, Instituto de Medicina Tropical da Universidade de São Paulo, São Paulo, Brazil, ³ Service de Parasitologie-Mycologie-AP-HP, Hôpital St Antoine, Paris, France, ⁴ Institut National de la Santé et de la Recherche Médicale UMR 1135, Centre National de la Recherche Scientifique ERL 8255, Sorbonne Universités, University Pierre and Marie Curie (UPMC), Paris, France, ⁵ Centre d'Immunologie et des Maladies Infectieuses, Ed de l'hôpital, Paris, France



Trichosporon mucoide

ASCOMICETI CONIDIO TALLICO

Genere: *Trichothecium*

Specie: *Trichothecium roseum*

Trichothecium roseum produce colonie di color rosa e per la produzione di aleurioconidi.

T. roseum cresce in modo ottimale a 25 °C di temperatura, meno a 5 °C e tollera temperature fino a un massimo di 35 °C.

E' una muffa saprofita che è stata isolata da vari alimenti come cereali, frumento, farine, derivati carnei e frutta secca.

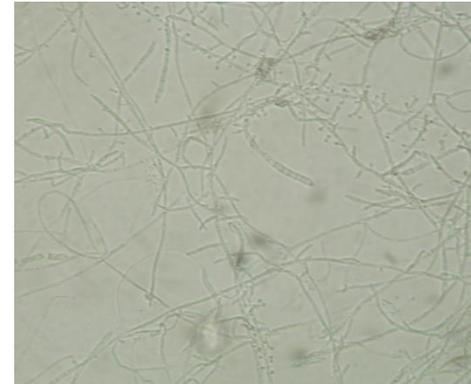


ASCOMICETI CONIDIO TALLICO

MICROSPORUM



TRICHOPHYTON



EPIDERMOPHYTON



ASCOMICETI CONIDIO TALLICO

REVIEW

Open Access

The habitat of *Coccidioides* spp. and the role of animals as reservoirs and disseminators in nature

María del Rocío Reyes-Montes¹, María Ameyali Pérez-Huitrón¹, Jorge Luis Ocaña-Monroy¹, María Guadalupe Frías-De-León², Erick Martínez-Herrera³, Roberto Arenas³ and Esperanza Duarte-Escalante^{4*}

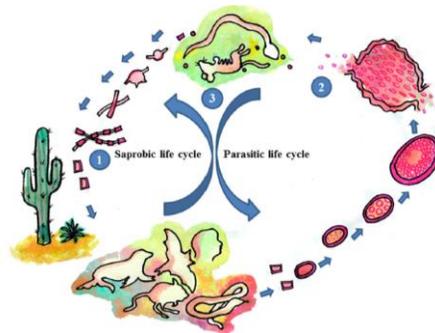
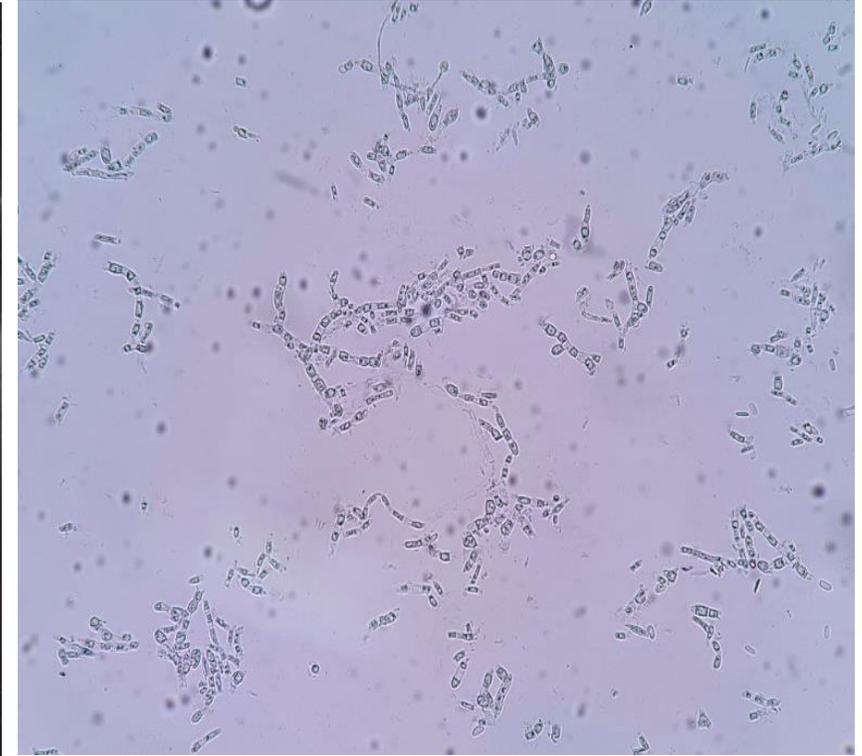


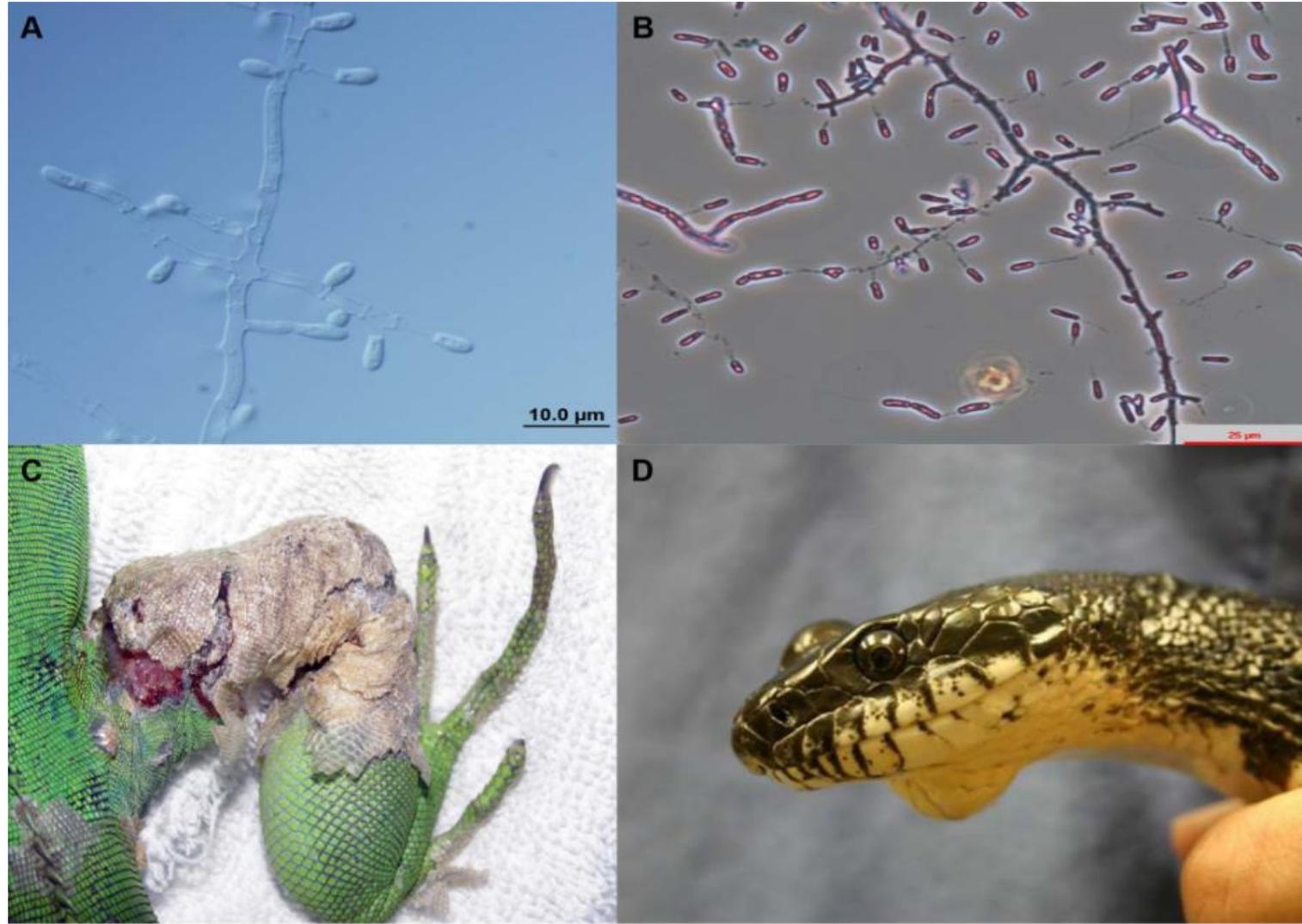
Fig. 1 Fungi belonging to the genus *Coccidioides* inhabit arid and semi-arid zones with alkaline soils and extreme temperatures. Under these conditions, they grow in a mycelial form and develop asexual reproductive structures. (1) These structures may be dispersed by the wind and inhaled by mammals, including humans, where dimorphic changes occur, giving rise to a parasitic form that has spherules and endospores. (2) Hundreds of endospores are released, and each endospore has the capacity to give rise to another spherule, repeating the life cycle in the host. In humans, the infection may progress to disease, or it may be eradicated by the immune system. Similarly, in animals, the infection may or may not lead to disease. In the case of disease and eventual death of the host, *Coccidioides* become exposed to the environment and return to a mycelial form (3), thus becoming integrated once again into their habitat.



Coccidioides spp

ASCOMICETI CONIDIO TALLICO

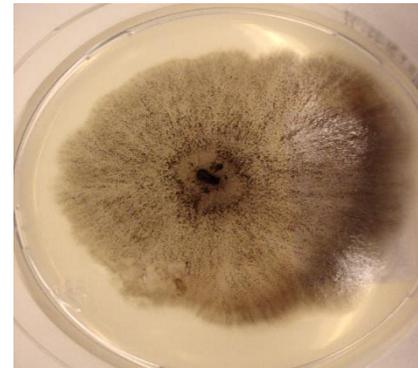
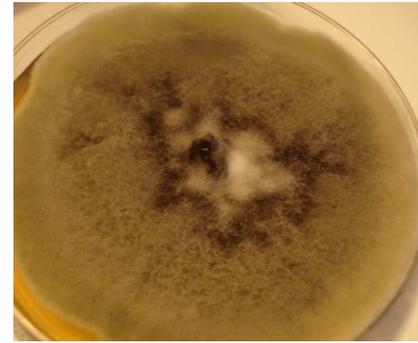
Nannizziopsis,
Paranannizziopsis
Ophidiomyces,
Chrysosporium



ASCOMICETI CONIDIO BLASTICO (POROCONODI)

Alternaria, Bipolaris, Curvularia

Macroconidi settati scuri che originano per conidiogenesi oloblastica acropetalica simpodiale



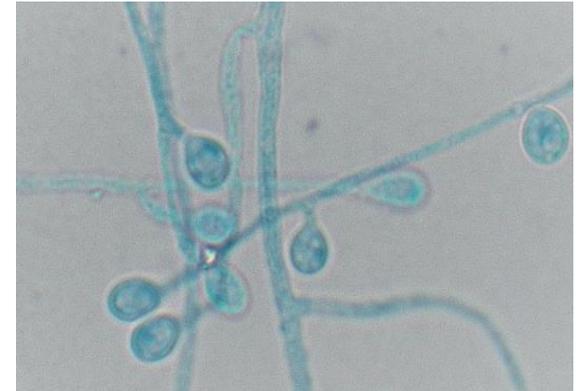
ASCOMICETI CONIDIO BLASTICO ANELLOCONIDI

Conidi enteroblastici basopetalici

Scopulariopsis spp.



Scedosporium apiospermum



ASCOMICETI CONIDIO BLASTICO



PubMed®

scopulariopsis systemic infection

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Save Email Send to

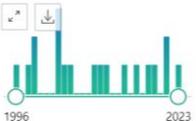
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18 results

Page 1 of 2

RESULTS BY YEAR



TEXT AVAILABILITY

Abstract

Free full text

Full text

Nondermatophyte mould onychomycosis.

1 Gupta AK, Summerbell RC, Venkataraman M, Quinlan EM. *J Eur Acad Dermatol Venereol.* 2021 Aug;35(8):1628-1641. doi: 10.1111/jdv.17240. Epub 2021 Apr 11. PMID: 33763903 Review.

Share There are several diagnostic methods used to identify NDMs, however, repeated laboratory isolation is recommended to validate pathogenicity. With NDM and mixed **infection** (dermatophytes plus NDM onychomycosis on the rise, accurate clinical diagnosis along with mycological ...

Scopulariopsis brevicaulis Rhinosinal Infection in a Dog.

2 Sri-Jayantha L, Matthews KG, Scharf V. *J Am Anim Hosp Assoc.* 2019 Jan;Feb;55(1):e55102. doi: 10.5326/JAAHA-MS-6869. Epub 2018 Nov. PMID: 30427708

Share This is the first reported case of a fungal rhinosinusitis caused by *S. brevicaulis* in a dog. Reports of

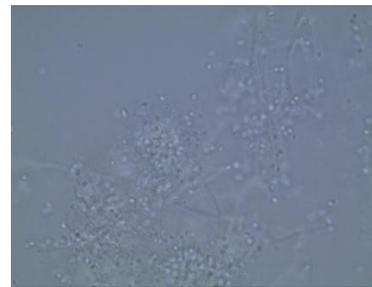
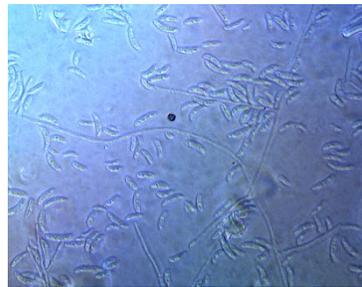
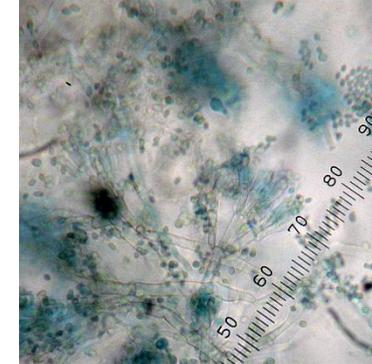
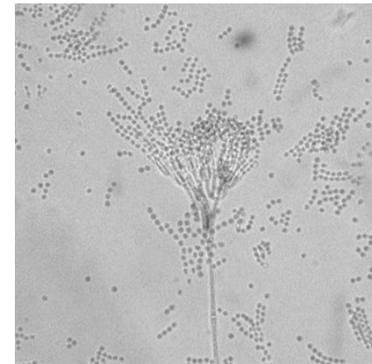
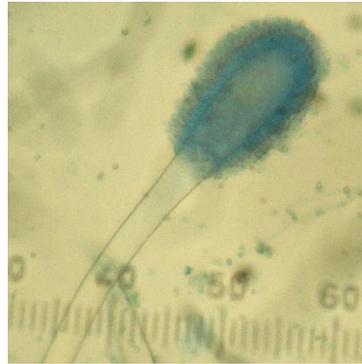
Scopulariopsis spp



Scedosporium apiospermum

ASCOMICETI CONIDIO BLASTICO FIALOCONIDI

Conidi enteroblastici
basopetalici
che originano da fialide



ASCOMICETI CONIDIO BLASTICO FIALOCONIDI

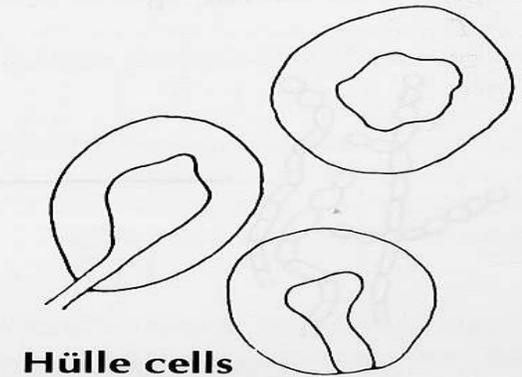
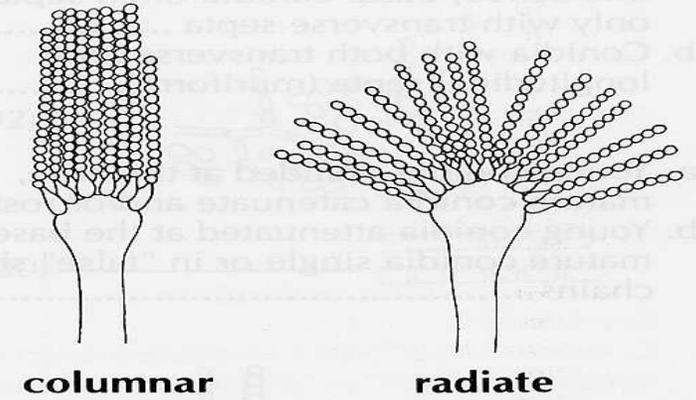
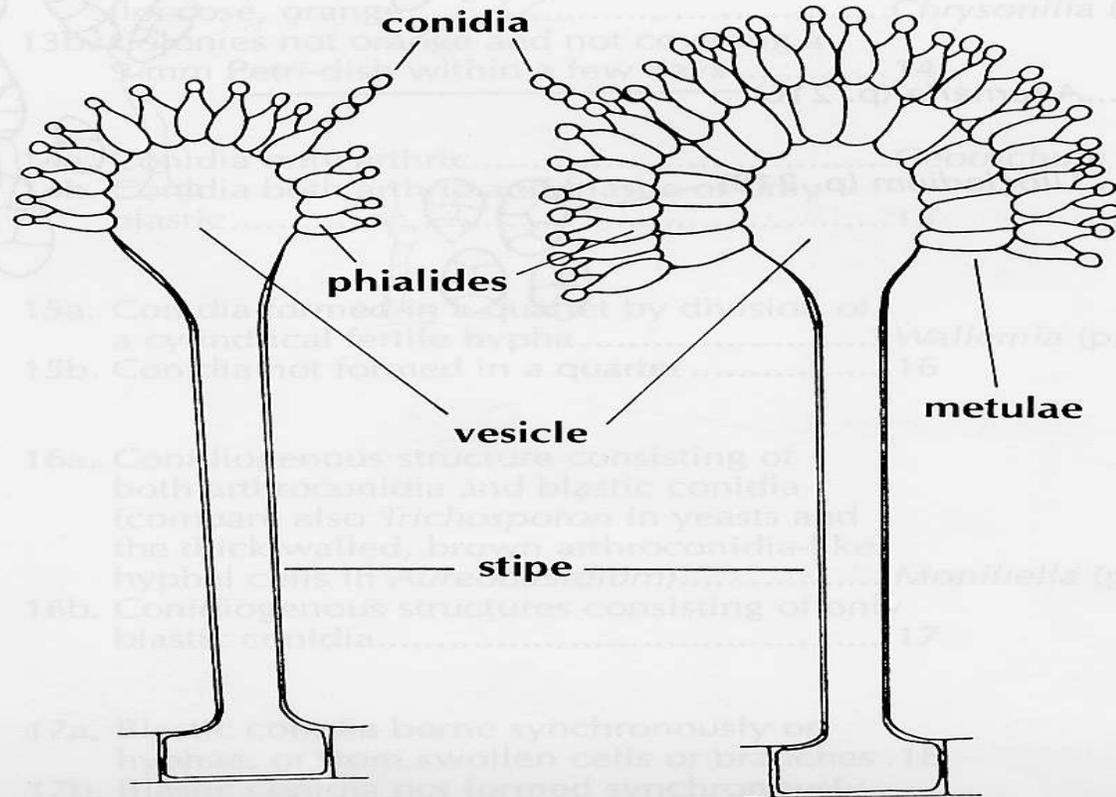
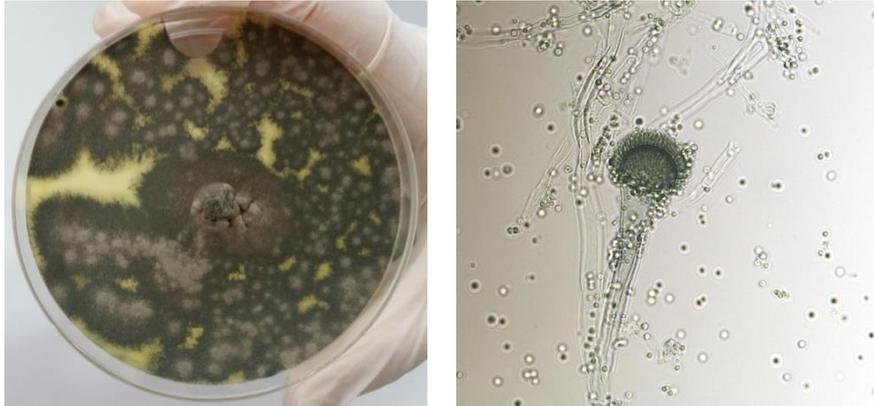


Fig. 23. Morphological structures in *Aspergillus*.

ASCOMICETI CONIDIO BLASTICO FIALOCONIDI

Aspergillus section *Fumigati*



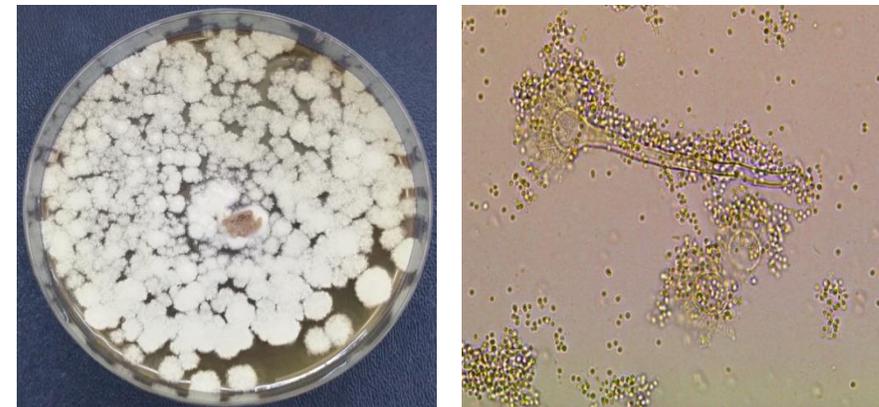
Aspergillus section *Nigri*



Aspergillus section *Flavi*



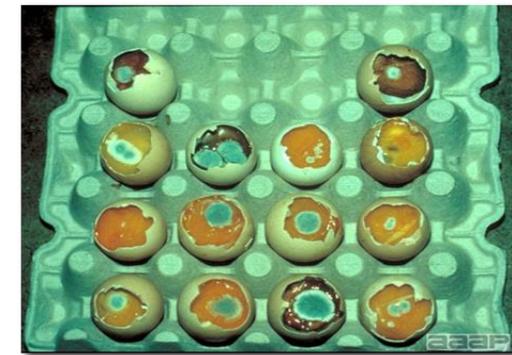
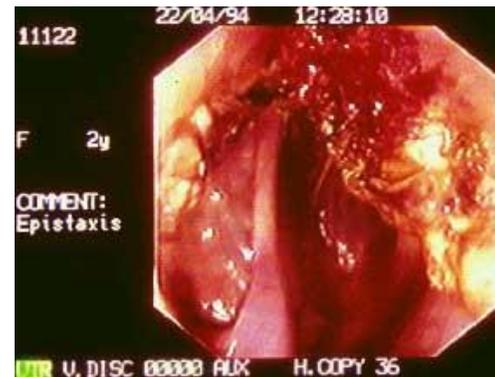
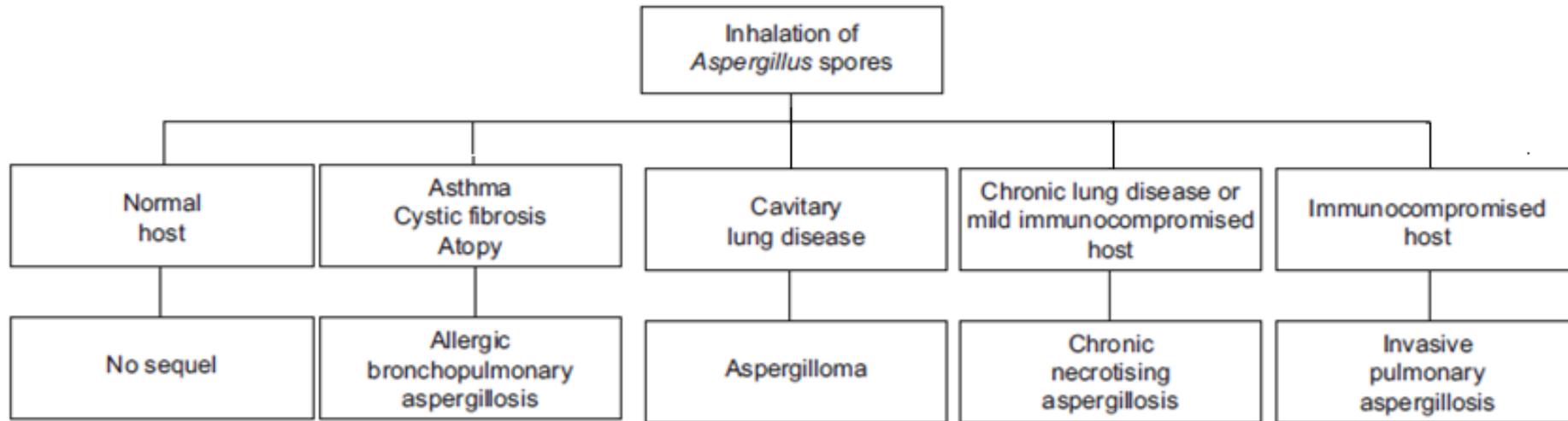
Aspergillus section *Terrei*



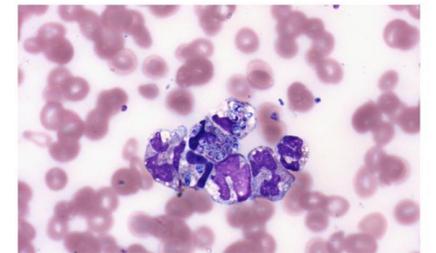
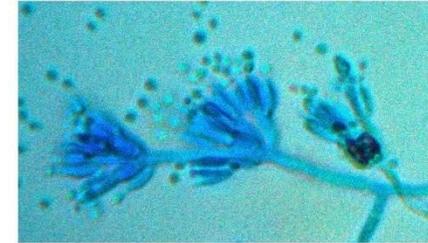
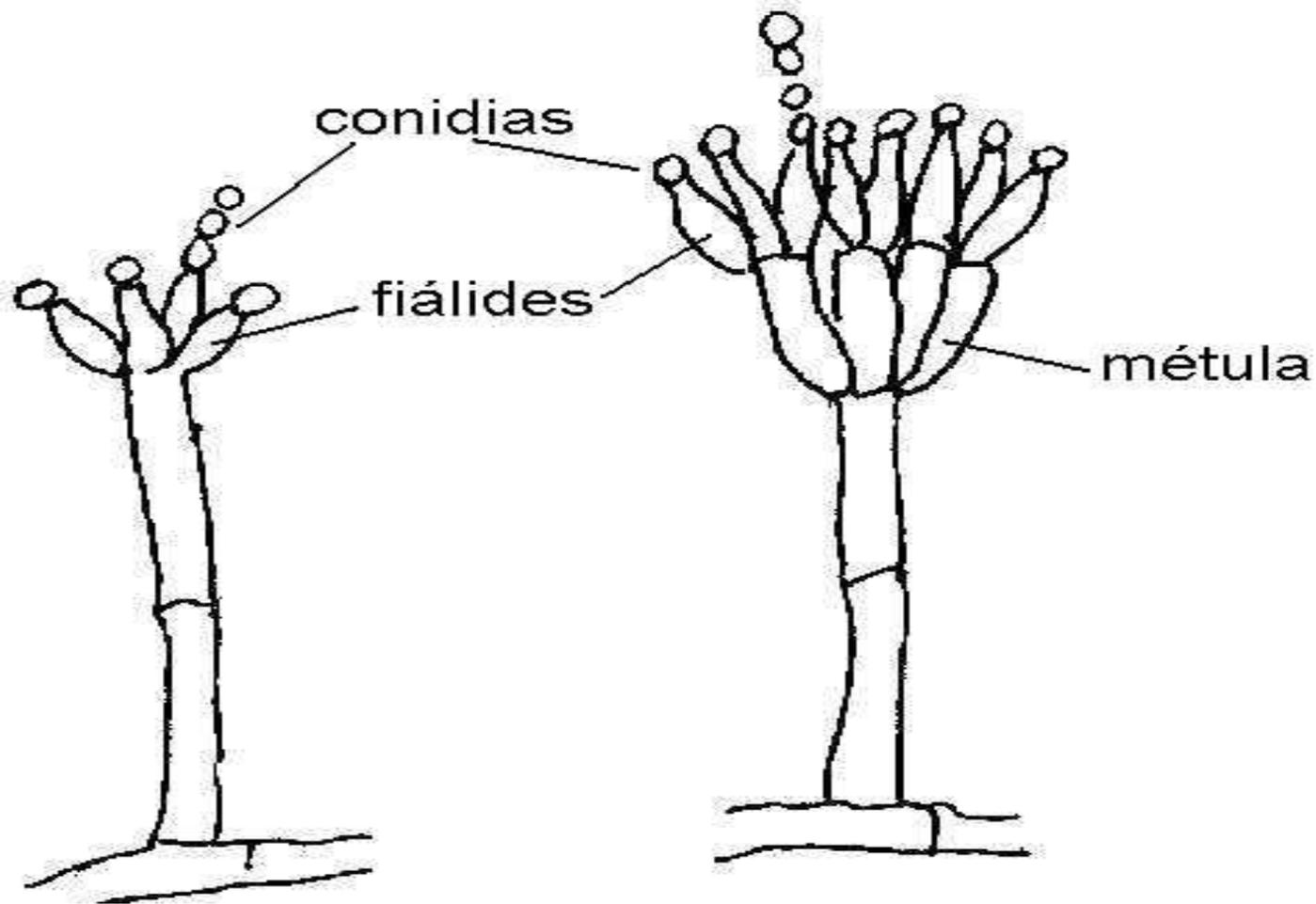
Analisi di sequenza dell'ITS, per identificazione a livello di section

Analisi di sequenza dei geni β -tubulina e calmodulina per identificazione a livello di specie

ASCOMICETI CONIDIO BLASTICO FIALOCONIDI



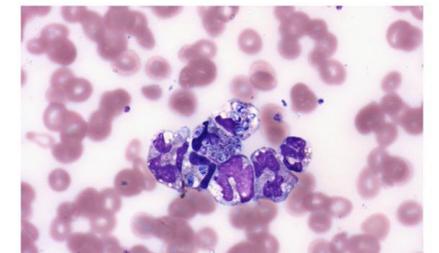
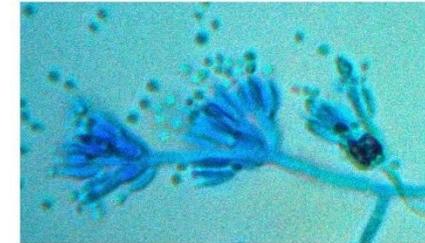
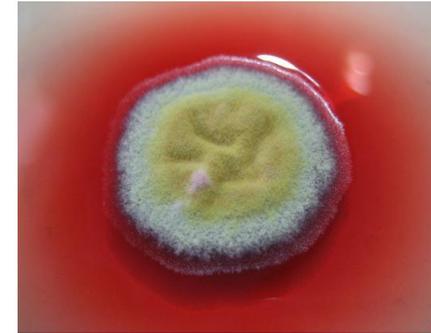
ASCOMICETI CONIDIO BLASTICO FIALOCONIDI



P. marneffe = *Talaromyces marneffe*

<https://doi.org/10.4061/2011/764293>

ASCOMICETI CONIDIO BLASTICO FIALOCONIDI



P. marneffei = *Talaromyces marneffei*
<https://doi.org/10.4061/2011/764293>

ASCOMICETI CONIDIO BLASTICO FIALOCONIDI

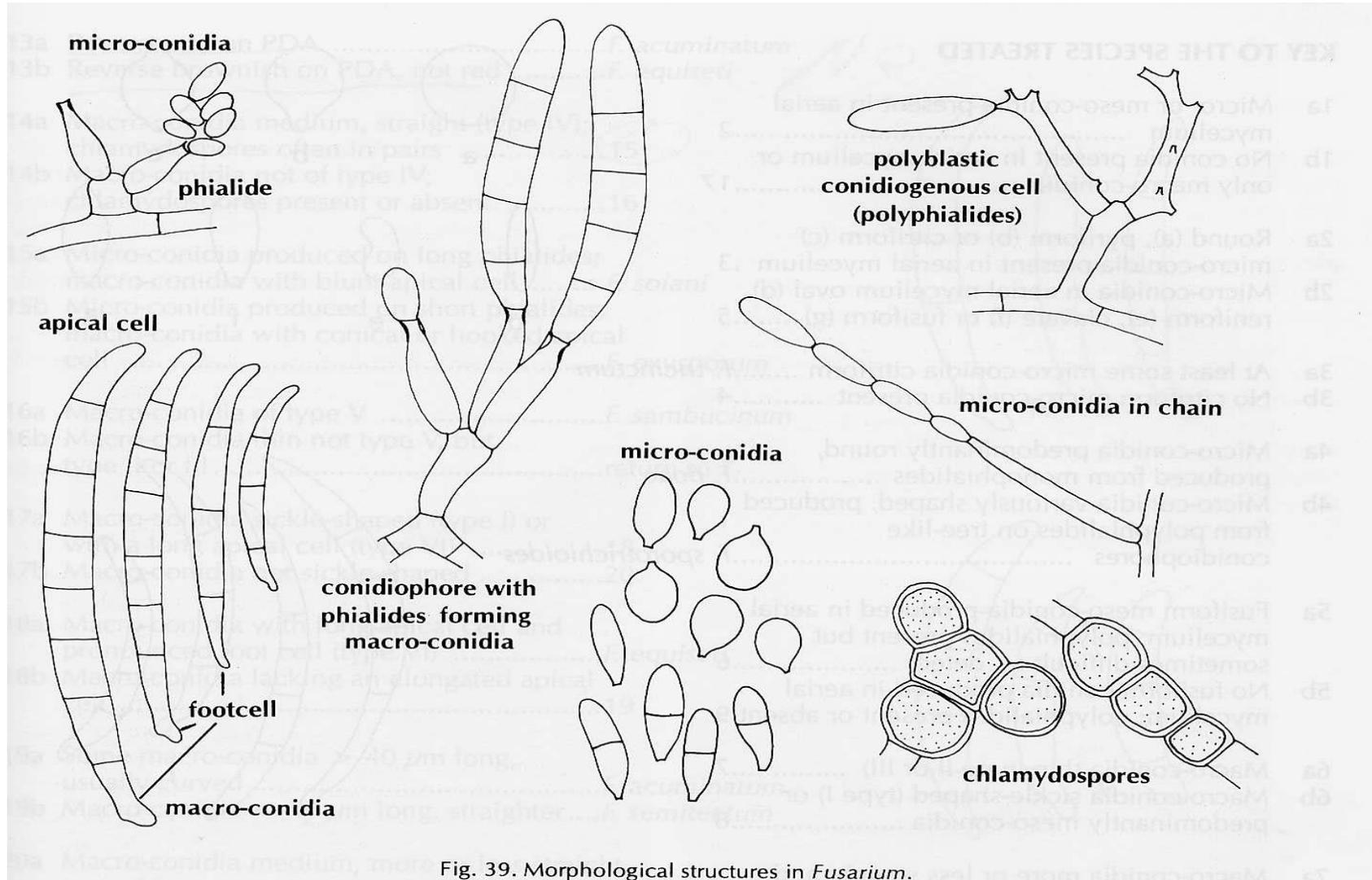


Fig. 39. Morphological structures in *Fusarium*.



ASCOMICETI CONIDIO BLASTICO FIALOCONIDI



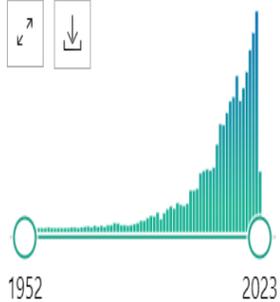
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RESULTS BY YEAR



Showing results for *Fusarium infection*

Your search for *Fusarium infecion* retrieved no results

Disseminated **Fusarium solani** complex infection.

1 Ang A, Chew KL.

Cite Clin Microbiol Infect. 2020 Dec;26(12):1636-1637. doi: 10.1016/j.cmi.2020.05.040. Epub 2020 Jun 12.

PMID: 32540471 **Free article.** No abstract available.

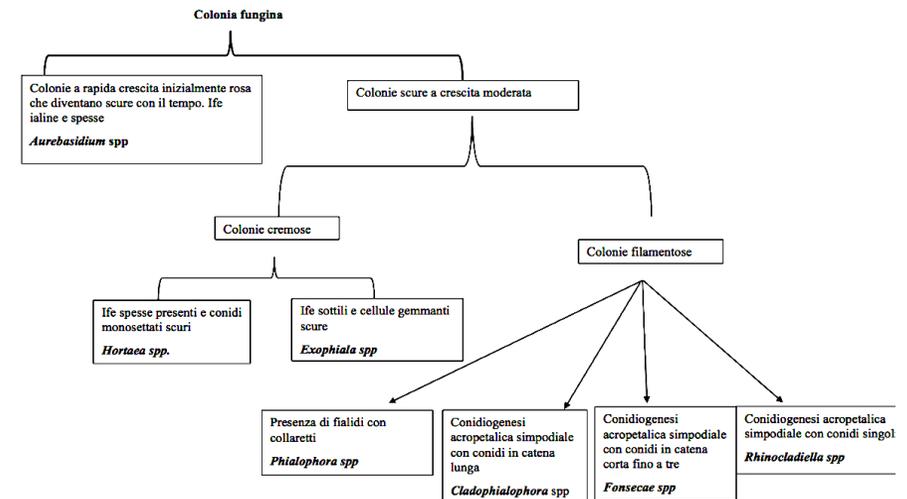
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ASCOMICETI E LIEVITI

Lieviti chiari (Candida spp. e Geotrichum spp)

Black yeasts and parenti filamentosi:



ASCOMICETI E LIEVITI

IDENTIFICHIAMO ???????

