

Meeting of the ISHAM Working groups on Black Yeasts and Chromoblastomycosis

Emerging Potential of Black Yeasts - Programme

Venue: Hotel Slon, Ljubljana, Slovenia.

Dates: 14-16 May, 2010.

Organizers: Nina Gunde-Cimerman, Polona Zalar, Ana Plemenitaš, Martin Grube and Sybren de Hoog.

May 14th

Theme 1: Ecology, evolution and phylogeny

8.50 – 9.00 Nina Gunde – Cimerman: Opening address.

9.00 – 10.45 *Ecology: The weird habitats of black yeasts - part 1*

(Chair: Laura Selbmann; Cochair: Polona Zalar)

9.00 – 9.30 Sybren de Hoog: Black yeasts between Beauty and Beast.

9.30 – 9.45 Daniela Isola, Laura Selbmann, Sybren de Hoog, Laura Zucconi and Silvano Onofri: A worldwide sampling of rock fungi: phylogenetic affiliation.

9.45 – 10.00 Silva Sonjak, Tina Kogej, Nina Gunde – Cimerman: Black yeasts tolerate extremely high temperatures.

10.00 – 10.15 Polona Zalar, Cene Gostinčar, Mojca Šere, Nina Gunde-Cimerman: Black fungi in glaciers.

10.15 – 10.30 Silva Sonjak, Yenice Gursu Bukay, Nina Gunde – Cimerman: Magnesium-tolerant fungi from the bitterns.

10.30 – 10.45 Rok Tkavc, Cene Gostinčar, Polona Zalar, Nina Gunde – Cimerman: Black yeasts in hypersaline microbial mats of salterns.

10:45 – 11:15 Coffee break

11.15 – 13.00 Ecology: The weird habitats of black yeasts - part 2

(Chair: Sybren de Hoog; Cochair: Francesc Prenafeta)

11.15. – 11.30 Walter Buzina, Martin Grube: "Two black fungi with industrial niches: Acidomyces and Amorphototheca"

11.30 – 11.45 Francesc Prenafeta: Fungal/bacterial interactions in the biodegradation of TEX hydrocarbons (toluene, ethylbenzene and p-xylene) in biofilters operated under xerophilic conditions.

11.45 – 12.00 Derlene Attili-Angelis: Herpotrichiellaceous fungi and relatives from oil contaminated areas in Brazil.

12.00 – 12.15 Hermann Voglmayr: Biodiversity of Chaetothyriales in recently discovered symbiotic tropical ant-fungus associations

12.15 – 12.30 Konrad Dettner, Fernando Pagnocca: Black yeasts and relatives dispersed by Attini ants.

12.30 – 12.45 Rumsais Blatrix, Hermann Voglmayr, Marc-Andre Selosse: The symbiotic relationship between ants, plants and Chaetothyriales.

12.45 – 13.00 Andrzej Chlebicki: Early phase of 'coexistence' of fungi and bacteria in biofilm on rock wall in subterranean arsen mine.

13:00 – 14:00 Lunch

14.00 – 15.30 Ecology: The weird habitats of black yeasts - part 3

(Chair: Silvano Onofri; cochair: Cecile Gueidan)

14.00 – 14.30 Ekaterina Dadachova, Arturo Casadevall: Ionizing radiation and black fungi.

14.30 – 14.45 Polona Zalar, Monika Novak, Nina Gunde-Cimerman: Dishwashers – an indoor extreme environment for survival and propagation of *Exophiala dermatitidis*.

14.45 – 15.00 Jana Frank, Hans-Josef Schroers: Biology of Sooty Blotch Fly Speck Fungi.

15.00 – 15.15 Rosamma Philip: Black yeasts from Indian Ocean.

15.15 – 15.45 Coffee break

15.45 – 17.00 *Phylogeny: Where do they come from, and where do they go?*

(Chair: Martin Grube; Cochair: Cene Gostinčar)

15.45 – 16.15 Cene Gostinčar, Martin Grube, Sybren de Hoog, Polona Zalar, Nina Gunde - Cimerman: Extremotolerance in Fungi: evolution on the edge.

16.00 – 16.30 Laura Selbmann, Cécile Gueidan, Costantino Ruibal, Silvano Onofri, Sybren de Hoog: Millions of years without sex and still happy.

16.30 – 16.45 Cecile Gueidan, Martin Grube, Tino Ruibal, Laura Selbmann: The origin of pathogenic and hyperparasitic Chaetothyriales.

16.45 – 17.00 Marie Machouart, Kittipan Samerpitak: The Ochroconiales: new order, new genera.

May 15th

Theme 2: Pathogenic potential of black yeasts

(Chair: Gerhard Haase; Cochair: Vania Vicente)

8.45 – 9.00 Walter Boeger, Vania Vicente: Causative agents of Lethargic Crab Disease (LCD) in mangrove land crab *Ucides cordatus* (Ocypodidae).

9.00 – 9.15 Seyedmoitaba Seyedmusavi Tasieh, Vania Vicente, Javad Najafzadeh, Sybren de Hoog: The pathogenic potential of waterborne black yeasts.

9.15. – 9.30 Vania Vicente, Javad Najafzadeh, Jiufeng Sun, Sybren de Hoog: Molecular ecology of *Fonsecaea* sibling species isolated from endemic areas of chromoblastomycosis in Brazil.

9.30 – 9.45 Enrique Calvo: Antifungal therapy in a murine model of chronic chromoblastomycosis caused by *Fonsecaea pedrosoi*

9.45 – 10.00 Javad Najafzadeh: *Fonsecaea nubica* sp. nov, a new agent of human chromoblastomycosis revealed using molecular data.

10.00 – 10.15 Hamid Badali, Sybren de Hoog, Ilse Curfs-Breuker, Corné Klaassen, Jacques Meis: Use of Amplified Fragment Length Polymorphism to identify *Cladophialophora* strains related to cerebral phaeohyphomycosis and chromoblastomycosis with in vitro antifungal susceptibility.

10.15 – 10.45 Coffe break

10.45 – 11.00 Gerhard Haase: Cystic fibrosis.

11.00 – 11.15 Bert Gerrits van den Ende, Montarop Sudhadham, Jiufeng Sun: Positive selection of *Exophiala dermatitidis* genotype A in human environment.

11.15 – 11.30 Domen Jaklič, Nina Gunde-Cimerman, Hamid Badali: Antimycotic activity of an excretion of *Lucilia sericata* larvae.

11.30 – 11.45 Ditte Saunte, Bita Tarazooie, Maiken Arendrup, Sybren de Hoog: Melanized fungi in skin and nail - it probably matters.

11.45 – 12.00 Wendy W. van de Sande, J. de Kat, J Coppens, A.O. Ahmed, A. Fahal, H. Verbrugh, A. van Belkum: Melanin biosynthesis in *Madurella mycetomatis* and its effect on susceptibility to itraconazole and ketoconazole

Theme 3: Social programme

12:15 Departure for the excursion to the salterns of Sečovlje

14.00 Arrival to the salterns

14:00 – 15.00 Visit of the museum

15:00 – 15.30 Transport to the active part of the salterns

15:30 – 16.30 Tour of the active salterns

16:30 – 18.30 Dinner

18:30 – 20.00 Return to Ljubljana

May 16th

Theme 4: Adaptations to extreme environments and novel techniques for the study of black yeasts

(Chair: Ana Plemenitaš; Cochair: Katja Sterflinger)

9.00 – 9.30 Ana Plemenitaš, Nina Gunde–Cimerman: Molecular adaptations to hypersaline environments in halophilic *Hortaea werneckii* and some other selected fungi.

9.30 – 9.45 Martin Fettich, Ana Plemenitaš: The HOG pathway - *HwSHO1* genes in *Hortaea werneckii*.

9.45 – 10.00 Metka Lenassi, Ana Plemenitaš: NAD⁺-dependent glycerol-3-phosphate dehydrogenase proteins have distinct roles in adaptation to hypersaline environments in halophilic *Hortaea werneckii*.

10.00 – 10.15 Tina Kogej, Tea Lanišnik Rižner, Nina Gunde –Cimerman: Melanin synthesis in *Hortaea werneckii*.

10.15 – 10.30 Silvano Onofri, Laura Selbmann, Kasturi Venkateswaran, Giuliano Scalzi, Laura Zucconi: Survival of black fungi in space – preliminary results.

10.30 – 10.45 Kristina Sepčič, Polona Zalar, Nina Gunde - Cimerman: Biologically active compounds in extracts of some halophilic and halotolerant fungi from the ordo Dothideales and selected yeasts.

10:45 – 11:15 Coffee break

11.15 – 11.30 Daniela Isola, G. Marzban, Silvano Onofri, Katja Sterflinger: Protein profiling of microcolonial fungi: methods and first results.

11.30 – 11.45 Janja Zajc, Tomaž Vaupotič, Ana Plemenitaš, Nina Gunde - Cimerman: Salt-induced change in cell wall protein population of halophilic *Hortaea werneckii*.

11.45 – 12.00 Tanja Botič, Željko Knez, Kristina Sepčič, Nina Gunde – Cimerman: Effect of high hydrostatic pressure on selected Black Yeast species.

12.00. – 12.15 Gerhard Haase: The use of secondary structures in the barcoding of black yeasts.

12.15 – 12.30 Marie Machouart: The use of introns in population dynamics.

12.30 – 12.45 Concluding remarks

12.45 – 14.00 Lunch and departure