

Research Article:

**CARACTERIZAREA MOLECULARĂ A
BIODIVERSITĂȚII FUNGICE ȘI
IDENTIFICAREA TIMPURIE A
CIUPERCILOR ASOCIATĂ CU
DEGRADAREA PALMIERULUI DE ULEI, IN
PARTICULAR *GANODERMA BONINENSE***

**MOLECULAR CHARACTERIZATION
OF FUNGAL BIODIVERSITY AND
EARLY IDENTIFICATION OF FUNGI
ASSOCIATED WITH OIL PALM DECAY,
PARTICULARLY *GANODERMA
BONINENSE***

Alba ZAREMSKI*

Dr.- Researcher – CIRAD, UMR AGAP
Adresa/Address: F 34398 Montpellier, France
E-mail: alba.zaremski@cirad.fr

Emeric LECOEUR

Researcher – CIRAD, UMR AGAP
Adresa/Address: F 34398 Montpellier, France

Frédéric BRETON

Researcher – CIRAD, UMR AGAP
Adresa/Address: F 34398 Montpellier, France

Hubert DE FRANQUEVILLE

Researcher – Société PalmElit
Adresa/Address: Bât 14 Parc Agropolis - 2214 Bd de la Lironde, 34980 Montferrier sur Lez, France

BIBLIOGRAFIE / REFERENCES

Adaskaveg JE, Gilbertson RL (1994) Wood decay caused by Ganoderma species in the *G. lucidum* complex. In: Buchanan PK, Hseu RS, Moncalvo JM, eds. Ganoderma: systematics, phytopathology and pharmacology. Proceedings of contributed symposium 59A, B, 5th International Mycological Congress. Vancouver, August 14–21, 1994. pp. 79–93.

Altschul SF, Madden TL, Schaffer AA, Zhang J, Zhang Z, Miller W, Lipman DJ (1997) Gapped BLAST and PSI-BLAST: a new generation of protein database search programs. *Nucleic Acids Res.* 25:3389-402.

FAO (2013) FAOSTAT, <http://faostat3.fao.org/home/index.html#HOME>. 31/01/2013.

Gardes M, Bruns T (1993) ITS primers with enhanced specificity for Basidiomycetes - application to the identification of mycorrhizae and rusts. *Mol. Ecol.* 2:113-118.

Guerin-Laguette A, Conventi S, Ruiz G, Plassard C, Mousain D (2003) The ectomycorrhizal symbiosis between *Lactarius deliciosus* and *Pinus sylvestris* in forest soil samples: symbiotic efficiency and development on roots of a rDNA internal transcribed spacer-selected isolate of *L. deliciosus*. *Mycorrhiza* 13:17-25.

Lecellier G, Silar P (1994) Rapid methods for nucleic acids extraction from Petri dish-grown mycelia. *Current Genetics* 25:122-123.

Martin F, Diez J, Dell B, Delaruelle C (2002) Phylogeography of the ectomycorrhizal *Pisolithus* species as inferred from nuclear ribosomal DNA ITS sequences. *New Phytol.* 153:345-357.

Mitchell JI, Zuccaro A (2006) Sequences, the environment and fungi. *Mycologist*, 20(2):62-74.

Moreth U, Schmidt O (2000) Identification of indoor rot fungi by taxon-specific priming polymerase chain reaction. *Holzforschung* 54:1-8.

Miller RNG, Holderness M, Bridge PD, Chung GF, Zakaria MH (1999) Genetic diversity of Ganoderma in oil palm plantings. *Plant Pathol.* 48:595–603.

* Autor corespondent / Author to whom all correspondence should be addressed

Paterson RRM (2007) Ganoderma disease of oil palm - A white rot perspective necessary for integrated control. *Crop Protection*, 26(9):1369-1376.

Risler JL, Louis A, Mohsenizadeh S, Brezellec P, Diaz-Lazcoz Y (2003) Les comparaisons massives de séquences. *Laboratoire Génome et Informatique. Document pp. 23.*

Stalpers JA (1978) Identification of wood-inhabiting Aphylophorales in pure culture. *Stud. Mycol. Centraalb. Schimmelcult. Baarn* 16:1-248.

Utomo C, Niepold F (2000) Development of Diagnostic Methods for Detecting Ganoderma-infected Oil Palms. *Journal of Phytopathology*, 148:507–514.

White TJ, Bruns T, Lee S, Taylor J (1990) Amplification and direct sequencing of fungal ribosomal RNA genes for phylogenetics. In: *PCR Protocols. A guide to methods and applications*, Edition Innis MA, Gelfand DH, Sninsky JJ, White TJ Academic press, San Diego, USA, pp. 315-322.