

LFT-5830 FISILOGIA E BIOQUÍMICA FITOPATOLÓGICA

2º Semestre de 2016 - Prática 14.10.2016

ASSUNTO: Elicitação de um complexo de pigmentos (contendo fitoalexinas) em mesocótilos de sorgo por agente abiótico.

Bibliografia específica

- HIPSKIND, J.D.; HANAU, R.; LEITE, B. & NICHOLSON, R.L. Phytoalexin accumulation in sorghum: identification of an apigeninidin acyl ester. **Physiol. Mol. Plant Pathol.** 36: 381-396, 1990.
- LO, S-C; WEIERGANG, I.; BONHAM, C.; HIPSKIND, J.; WOOD, K. & NICHOLSON, R.L. Phytoalexin accumulation in sorghum: identification of a methyl ether of luteolinidin. **Physiol. Mol. Plant Pathol.** 49: 21-31, 1996.
- LOPEZ, A.M.Q. & PASCHOLATI, S.F. Accumulation of a complex of pigments in sorghum mesocotyls in response to wounding. **J. Phytopathol.** 135: 63-70, 1992.
- NICHOLSON, RL AND WOOD KV. 2001. Phytoalexins: What are they and how can we measure them? **Physiological and Molecular Plant Pathology**: 59:63-69
- NICHOLSON, R.L.; JAMIL, F.F.; SNYDER, B.A.; LUE, W.L. & HIPSKIND, J. Phytoalexin synthesis in the juvenile sorghum leaf. **Physiol. Mol. Plant Pathol.** 33: 271-278, 1988.
- NICHOLSON, R.L.; KOLLIPARA, S.S.; VINCENT, J.R.; LYONS, P.C. & GOMEZ, G.C. Phytoalexin synthesis by the sorghum mesocotyl in response to infection by pathogenic and nonpathogenic fungi. **Proc. Natl. Acad. Sci.** 84: 5520-5524, 1987.
- NIELSEN KA, GOTFREDSEN CH, BUCH-PEDERSEN MJ. AMMITZBOLL H, MATTSSON O, DUUS JO, NICHOLSON RL. 2004. Inclusions of flavonoid 3-deoxyanthocyanidins in *Sorghum bicolor* self-organize into spherical structures. **Physiological and Molecular Plant Pathology**. 65:187-196.
- OSSWALD, W.; STANGARLIN, J.R.; NICHOLSON, R.L.; BRUMMER, M.; WULFF, N.A.; DI PIERO, R.M.; PICCININ, E.; DI CIERO, L.; HOTO, F.V.; PASCHOLATI, S.F. 2004. The effect of acibenzolar-S-methyl on phytoalexin and PR-production induction on sorghum mesocotyls and on *Colletotrichum sublineolum*. **Summa Phytopathologica** 30 (4): 415-420.
- PASCHOLATI, S.F. Fisiologia do parasitismo: como as plantas se defendem. In. AMORIM, L.; REZENDE, J.A.M.; BERGAMIN FILHO, A. (Ed.). Manual de Fitopatologia – Princípios e Conceitos. Vol. 1. Ed. Ceres, Piracicaba, SP. 2011. Pág. 593-636.
- SNYDER, B.A.; LEITE, B.; HIPSKIND, J.; BUTLER, L.G. & NICHOLSON, R.L. Accumulation of sorghum phytoalexins induced by *Colletotrichum graminicola* at the infection site. **Physiol. Mol. Plant Pathol.** 39: 463-470, 1991.
- SNYDER, B.A. & NICHOLSON, R.L. Synthesis of phytoalexins in sorghum as a site-specific response to fungal ingress. **Science** 248: 1637-1639, 1990.
- TENKOUANO, A.; MILLER, F.R.; HART, G.E.; FREDERIKSEN, R.A. & NICHOLSON, R.L. Phytoalexin assay in juvenile sorghum: an aid to breeding for anthracnose resistance. **Crop Science** 33: 243-248, 1993.
- WEIERGANG, I.; HIPSKIND, J.D. & NICHOLSON, R.L. Synthesis of 3-deoxyanthocyanidin phytoalexins in sorghum occurs independent of light. **Physiol. Mol. Plant Pathol.** 49: 377-388, 1996.
- WULFF, N.A. & PASCHOLATI, S.F. Preparações de *Saccharomyces cerevisiae* elicitoras de fitoalexinas em mesocótilos de sorgo. **Scientia Agricola** 55: 138-143, 1998.
- WULFF, N.A. & PASCHOLATI, S.F. Partial characterization of sorghum phytoalexin elicitors isolated from *Saccharomyces cerevisiae*. **Fitopatol.Bras.** 24(3): 428-435, 1999.
- YAMAOKA, N.; LYONS, P.C.; HIPSKIND, J. & NICHOLSON, R.L. Elicitor of sorghum phytoalexin synthesis from *Colletotrichum graminicola*. **Physiol. Mol. Plant Pathol.** 37: 255-270, 1990.