

Fusarium solani, *F. moniliforme*, *F. graminearum* フサリウム症

区分	手法名 (文献)	プライマー		反応温度条件	增幅産物 bp	備考	推奨度
		名称	配列 (5'-3')				
PCR	(Nicholson et al. 1998)	Fg16NF	ACA GAT GAC AAG ATT CAG GCA CA	95°C15分→(95°C15秒、64°C30秒、72°C30秒) ×45サイクル→72°C5分	280 bp	<i>F. graminearum</i> 特異的PCR	—
		Fg16NR	TTC TTT GAC ATC TGT TCA ACC CA				
	(Murillo et al. 1998)	FUS1	CTTGGTCATGGGCCAGTCAAAGAC	(96°C1分、55°C90秒、72°C2分30秒)×32サイ クル	1.6kb	<i>F. moniliforme</i> 特異的PCR	—
		FUS2	CACAGTCACATAGCATTGCTAGCC				
nested -PCR	(Ahmad et al. 2010)	FSOF1	TTACCGAGTTATACAACTCATCA		440	18S rRNAとITS領域を含む	☆
		FSOR1	GCTCTCCAGTCGCAGGTGTTAG				
		FSOF2	AACGTTGCTTCGGCGGGAACAGA		380	FSOF1/R1のfirst PCR後に行うnested-PCR	☆
		FSOR2	TACTACGCAATGGAAGCTGCGG				
定量 PCR	(Bernal-Martínez et al. 2012)	Fsol1	CTCATCAACCCTGTGAACATACC			・ Molecular beacon probeを採用 ・ <i>Fusarium solani</i> 特異	—
		Fsol2	ATGCCAGAGCCAAGAGATCC				
		Fsol-MB1	CGCGA-GCCGTCTGTTCCCGCGAA-TCGCG				

文献

Nicholson, P., Simpson, D.R., Weston, G., Rezanoor, H.N., Lees, A.K., Parry, D.W. and Joyce, D. (1998) Detection and quantification of *Fusarium culmorum* and *Fusarium graminearum* in cereals using PCR assays. *Physiol Mol Plant Pathol* 53, 17–37.

Murillo, I., Cavallarin, L., & San Segundo, B. (1998). The development of a rapid assay for the detection of *Fusarium moniliforme*. *European Journal of Plant Pathology*, 104, 301–311.

S. Ahmad, Z.U. Khan, M. Theyyathel. Development of a nested PCR assay for the detection of *Fusarium solani* DNA and its evaluation in the diagnosis of invasive fusariosis using an experimental mouse model. *Mycoses*, 53 (2008), pp. 40-47

L. Bernal-Martínez, M.J. Buitrago, M.V. Castelli, J.L. Rodríguez-Tudela, M. Cuenca-Estrella. Detection of invasive infection caused by *Fusarium solani* and non-*Fusarium solani* species using a duplex quantitative PCR-based assay in a murine model of fusariosis. *Med Mycol*, 50 (2012), pp. 270-275