



Genetic diversity of the common bacterial blight pathogen of bean, *Xanthomonas axonopodis* pv. *phaseoli*, in Iran revealed by rep-PCR and PCR-RFLP analyses

Submitted by Emmanuel Lemoine on Thu, 02/12/2015 - 13:06

Titre	Genetic diversity of the common bacterial blight pathogen of bean, <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> , in Iran revealed by rep-PCR and PCR-RFLP analyses
Type de publication	Article de revue
Auteur	Zamani, Zahra [1], Bahar, Masoud [2], Jacques, Marie-Agnès [3], Lak, Mohammad Reza [4], Akhavan, Alireza [5]
Editeur	Springer Verlag
Type	Article scientifique dans une revue à comité de lecture
Année	2011
Langue	Anglais
Date	2011/10/01
Numéro	10
Pagination	2371 - 2378
Volume	27
Titre de la revue	World Journal of Microbiology and Biotechnology
ISSN	0959-3993
Mots-clés	Applied Microbiology [6], Biochemistry, general [7], Biotechnology [8], Environmental Engineering/Biotechnology [9], Genetic diversity [10], Iran [11], Microbiology [12], rep-PCR [13], <i>Xanthomonas axonopodis</i> pv. <i>Phaseoli</i> [14]
Résumé en anglais	<p><i>Xanthomonad</i>-like bacteria that are associated with common bacterial blight of bean in Iran were identified on the basis of their colonial morphology, biochemical and serological properties, presence of a specific DNA fragment using PCR primers and pathogenicity on bean. <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> (Xap) strains were further characterized using rep-PCR and restriction fragment length polymorphism (RFLP). RFLP profiles generated by the restriction endonucleases <i>Rsa</i>I, <i>Taq</i>I, <i>Hae</i>III and <i>Sau</i>96I and rep-PCR analysis revealed that Iranian strains were relatively genetically homogenous. The similarity coefficients among the strains ranged from 0.87 to 1. The genetic diversity coefficients among strains from three infected provinces, Isfahan, Markazi and Lorestan, were 0.019, 0.072 and 0.033, respectively. The low overall level of polymorphism within Xap isolates collected from the three Iranian infected regions could suggest that few initial inoculum introductions might have distributed among these different bean-growing areas in Iran.</p>
URL de la notice	http://okina.univ-angers.fr/publications/ua7787 [15]
DOI	10.1007/s11274-011-0705-7 [16]
Lien vers le document	http://dx.doi.org/10.1007/s11274-011-0705-7 [16]

Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=12163](http://okina.univ-angers.fr/publications?f[author]=12163)
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=12164](http://okina.univ-angers.fr/publications?f[author]=12164)
- [3] <http://okina.univ-angers.fr/m.jacques/publications>
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=12166](http://okina.univ-angers.fr/publications?f[author]=12166)
- [5] [http://okina.univ-angers.fr/publications?f\[author\]=12167](http://okina.univ-angers.fr/publications?f[author]=12167)
- [6] [http://okina.univ-angers.fr/publications?f\[keyword\]=12029](http://okina.univ-angers.fr/publications?f[keyword]=12029)
- [7] [http://okina.univ-angers.fr/publications?f\[keyword\]=105](http://okina.univ-angers.fr/publications?f[keyword]=105)
- [8] [http://okina.univ-angers.fr/publications?f\[keyword\]=2729](http://okina.univ-angers.fr/publications?f[keyword]=2729)
- [9] [http://okina.univ-angers.fr/publications?f\[keyword\]=12030](http://okina.univ-angers.fr/publications?f[keyword]=12030)
- [10] [http://okina.univ-angers.fr/publications?f\[keyword\]=12031](http://okina.univ-angers.fr/publications?f[keyword]=12031)
- [11] [http://okina.univ-angers.fr/publications?f\[keyword\]=10846](http://okina.univ-angers.fr/publications?f[keyword]=10846)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=9246](http://okina.univ-angers.fr/publications?f[keyword]=9246)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=12032](http://okina.univ-angers.fr/publications?f[keyword]=12032)
- [14] [http://okina.univ-angers.fr/publications?f\[keyword\]=12033](http://okina.univ-angers.fr/publications?f[keyword]=12033)
- [15] <http://okina.univ-angers.fr/publications/ua7787>
- [16] <http://dx.doi.org/10.1007/s11274-011-0705-7>

Publié sur *Okina* (<http://okina.univ-angers.fr>)