



Complete genomic sequence of *Raphanus sativus* cryptic virus 4 (RsCV4), a novel alphapartitivirus from radish

Submitted by Matthieu Barret on Tue, 06/04/2019 - 21:04

Titre	Complete genomic sequence of <i>Raphanus sativus</i> cryptic virus 4 (RsCV4), a novel alphapartitivirus from radish
Type de publication	Article de revue
Auteur	Svanella-Dumas, Laurence [1], Theil, Sébastien [2], Barret, Matthieu [3], Candresse, Thierry [4]
Editeur	Springer
Type	Article scientifique dans une revue à comité de lecture
Année	2018
Langue	Anglais
Date	Avril 2018
Numéro	4
Pagination	1097-1100
Volume	163
Titre de la revue	Archives of Virology
ISSN	0304-8608

Résumé en anglais

The present work reports the discovery and complete genome sequencing of a virus from symptomless radish seedlings, classifiable as a novel member of the genus *Alphapartitivirus*, family *Partitiviridae*. Total RNA extracted from germinating seedlings was sequenced using Illumina technology. Bioinformatic analysis of the RNA-seq data revealed two contigs representing the near full-length genomic sequences of two genomic RNAs representing a new virus. Analysis of the genome sequence (excluding the polyA tail, RNA1: 1976 nt and RNA2: 1751 nt, respectively) showed a genomic organization typical of viruses classed within the *Partitiviridae*, with each genomic RNA encoding a single open reading frame (ORF). Phylogenetic analysis of the RNA dependent RNA polymerase (RNA1 ORF) and of the capsid protein (RNA2 ORF) clearly showed the new virus can be classified within the genus *Alphapartitivirus*, but sequence divergence establishes it as a new species, for which the name "*Raphanus sativus* cryptic virus 4" is proposed.

URL de la notice	http://okina.univ-angers.fr/publications/ua19709 [5]
DOI	10.1007/s00705-017-3693-6 [6]
Lien vers le document	https://link.springer.com/article/10.1007%2Fs00705-017-3693-6 [7]
Titre abrégé	Arch Virol

Liens

- [1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=37350>
[2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=37351>

- [3] <http://okina.univ-angers.fr/matthieu.barret/publications>
- [4] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=13193>
- [5] <http://okina.univ-angers.fr/publications/ua19709>
- [6] <http://dx.doi.org/10.1007/s00705-017-3693-6>
- [7] <https://link.springer.com/article/10.1007%2Fs00705-017-3693-6>

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