Identification and partial characterization of Taastrup virus: a newly identified member species of the Mononegavirales

We present a 8904-nt sequence of the central part of the RNA genome of a novel virus with a filovirus-like, nonidentical morphology named Taastrup Virus (TV) detected in the leafhopper Psammotettix alienus. Sequence analysis identified five potential open reading frames (ORFs) and a complex pattern of homologies to various members of the Mononegavirales suggests a genome organization with the following order of genes: 3'-N-P-M-G-L-5'. Sequence analyses reveal an unusually large glycoprotein (G) containing both potential O-linked (14) and N-linked (9) glycosylation sites—a feature shared with the glycoproteins of Filoviridae and Pneumovirinae, and a nucleoprotein (N) with homology to the nucleoprotein of viral hemorrhagic septicemia virus (VHSV), a member of the Rhabdoviridae. Highly conserved domains were identified in the RNA-dependent RNA polymerase (L) between TV and other viruses within the order of Mononegavirales, and homology was found in particular with members of the Rhabdoviridae. The sequence similarities and the unique filovirus-like but nonidentical morphology unambiguously refer this newly identified virus to the order of Mononegavirales but to no family more than any to other within the order.

General information
State: Published
Organisations: National Veterinary Institute
Contributors: Bock, J., Lundsgaard, T., Pedersen, P., Christensen, L. S.
Pages: 49-59
Publication date: 2004
Peer-reviewed: Yes

Publication information
Journal: Virology
Volume: 319
Issue number: 1
ISSN (Print): 0042-6822
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Scopus rating (2017): CiteScore 3.14 SJR 1.728 SNIP 0.93
Web of Science (2017): Impact factor 3.374
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 3.47 SJR 1.937 SNIP 0.955
Web of Science (2016): Impact factor 3.353
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 3.2 SJR 1.796 SNIP 0.899
Web of Science (2015): Impact factor 3.2
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 3.14 SJR 1.705 SNIP 0.915
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 3.37 SJR 1.78 SNIP 0.948
Web of Science (2013): Impact factor 3.278
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 3.57 SJR 1.768 SNIP 0.976
Web of Science (2012): Impact factor 3.367
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 3.32 SJR 1.686 SNIP 0.929
Web of Science (2011): Impact factor 3.351
ISI indexed (2011): ISI indexed yes