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Positive-strand RNA viral infections of the red imported fire ant,
*Solenopsis invicta*

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An expression library was created and 2,304 clones sequenced from
a monogyne colony of *Solenopsis invicta*. The primary intention of
the project was to utilize homologous gene identification to facilitate
discovery of viruses infecting this ant pest that could potentially be
used in pest management. Two viruses were ultimately discovered
by the method, *Solenopsis invicta* viruses 1 and 2 (SINV-1 and -2).
SINV-1 and -2 are positive strand RNA viruses. The SINV-1
genome is monopartite and dicistronic. SINV-2 is monopartite and
dicistronic (4 open reading frames). Both viruses possessed
consensus sequences characteristic of the helicase, cysteine protease,
and RNA-dependent RNA polymerase sequence motifs of positive-
strand RNA viruses. Characterization of each viral genome and the
potential for use as control agents are discussed.