


Intraguild predation decreases predator fitness with potentially varying effects on pathogen transmission in a herbivore host

Andrew J. Flick¹  · Tom A. Coudron² · Bret D. Elder¹

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(1992). (2010). (2012). (2016). (2007; 2008; 2014). (2015). (2003). (2003; 2016). (2009). (2005). (2005; 2008). (2000; 2005). (2000). (2012). *Daphnia dentifera* *Chaoborus* (2011). (2009;

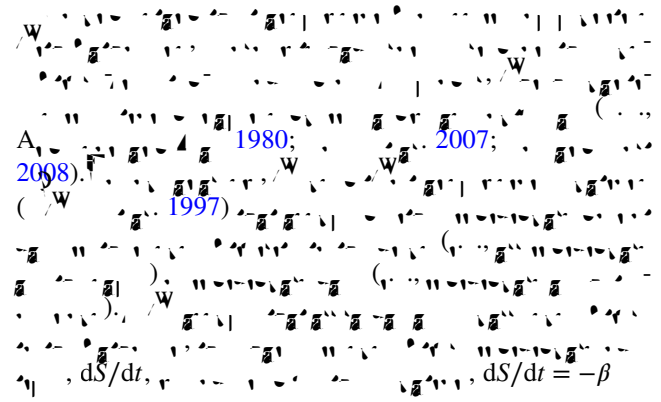
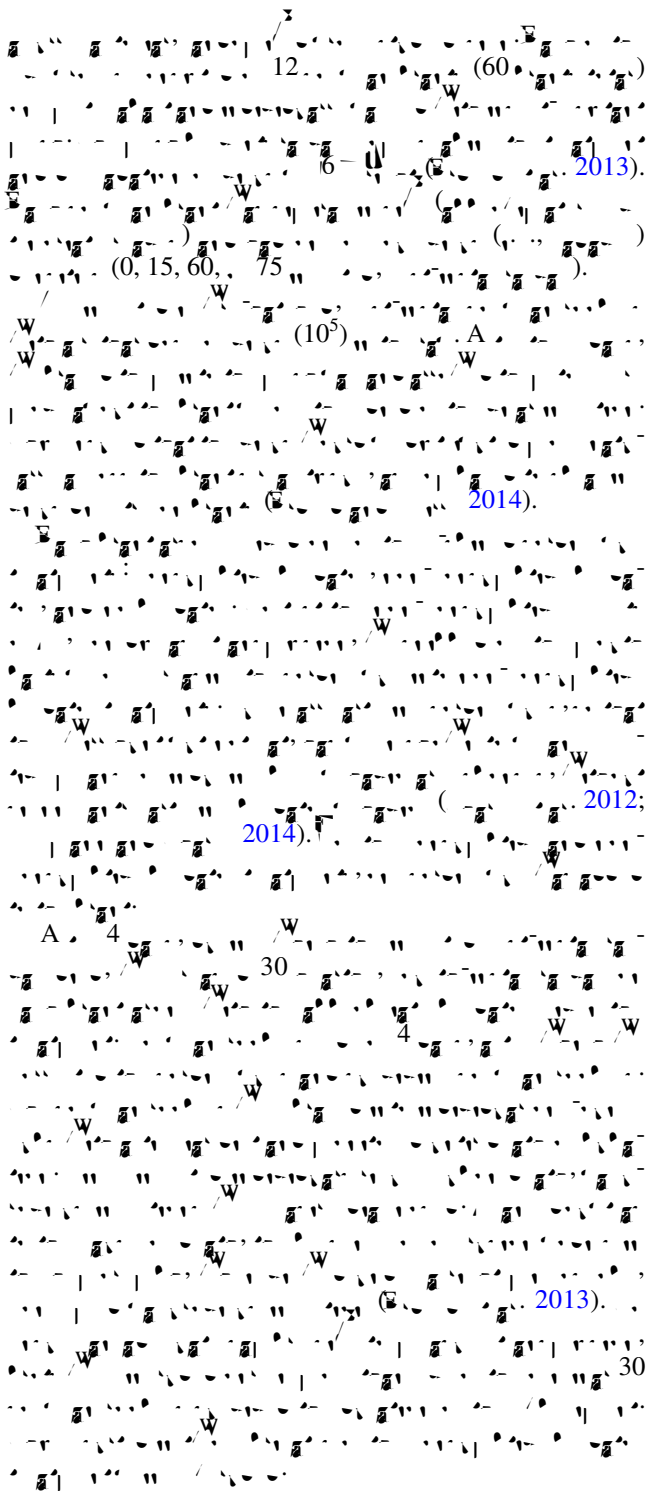
(2011; 2011). (2011). (2013). (2016). *Podisus nigrispinus* *Anticarsia gemmatalis* (2001). (1992; 2005). (2005). (2016).

Materials and methods

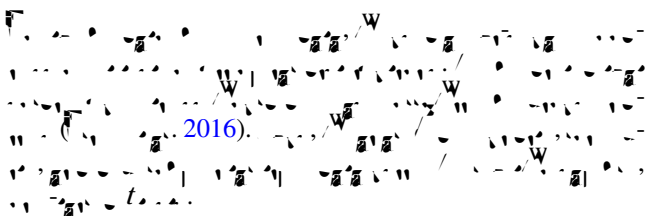
Study system

(*Pseudopiusia includens*) (*Podisus maculiventris*) *Autographa californica* (A.).

... W W ... W ...
... W ...
... W ...
A ...
...
... (...) ...
1986). ... W ...



Data analysis



... (2008). ... 3.4.3 (2013).

Results

Laboratory studies

Predator preference

... (26 ... 13 ... $\chi^2=4.33$, $P=0.037$, $n=39$), ... (55 ... 49 ... $\chi^2=0.35$, $P=0.56$, $n=104$).

Predator fitness

...

(2).
 (2).
 (1, 3, 12).
 33%
 67%
 (2).

(2).

Discussion

(1).
 (1).
 (2).
 (1).
 (2).
 (2003).
 (1, 3, 12).
 24% 1.32
 18% (1).
 (2).
 16 (1981).
 (A1).

... (2012), ... (2012), ... (2016), ... (1978; 2012), ... (1989), ... (1989), ... (2001), ... (1989; A 2004), ... (2006; 2007; 2009; 2015), ... (2010; 2015).

Acknowledgements

A...

... #43010, ... /10.18258/0812, ... -1316334.

Author contribution statement

A...

Compliance with ethical standards

Conflict of interest

...

References

A. ... (1984), ... *Anticarsia gematalis* (), ... *Podisus maculiventris* () (), ... 13:599 602

A. ... (1980), ... 210:658 661

A. ... (2004), ... 7:557 564

A. ... (2014), ... 7:87 100

A. ... (1988), ... () ... 81:310 316

A. ... (2004), ... *Lacania oleracea* (), ... *Podisus maculiventris* (), ... 128:548 553

A. ... (2012), ... 87701. ... *Anticarsia gematalis*, *Pseudoplusia includens* (), ... 68:1083 1091

A. ... (2017), ... 1.0.20. ... / / A ... 15 / 2020

A. ... (2008), ... 6 ... (2007), ... 88:2681 2688

A. ... (2003), ... (2009), ... 90:2850 2858

A. ... (2015), ... A, ... 84:734 744

()? 56:244 248
A (2009) 12:1 12
(1994)