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Table A1 Overall mean effect size of each treatment. Trim and fill analyses were used to calculate the number of missing studies and the adjusted mean for each group.

Treatment	Mean	Missing Studies	Adjusted Mean
Fecundity	-0.6132	2	-0.4934
Choice	-1.0171	2	-0.757
Longevity	-0.3108	0	-0.3108
Development	0.0819	1	0.0803
Survival	-0.6643	0	-0.6643

Table A2 Mean effect sizes (\pm 95% confidence interval) for each IG_{Pred} (predator and parasitoid) by each IG_{Prey} (fungus and virus). Negative values indicate a decrease from the control group while positive values represent an increase from control groups. NA's signify groups that had either 0 or 1 study and thus could not be analyzed separately. Degrees of freedom for each variable are in parentheses.

	Pathogen	Predator	Parasitoid
Development	Fungus	1.2423 ± 2.6139 (1)	0.5155 ± 0.2178 (13)
	Virus	-0.0518 ± 0.0954 (26)	-0.0124 ± 0.0718 (61)
Longevity	Fungus	NA	-0.6411 ± 0.3549 (6)
	Virus	-0.2331 ± 0.1739 (23)	0.0162 ± 1.8978 (1)
Fecundity	Fungus	-0.5383 ± 3.2265 (1)	-0.0362 ± 2.5979 (1)
	Virus	-0.6400 ± 0.6870 (12)	-0.6417 ± 0.3341 (28)
Survival	Fungus	-5.4701 ± 3.0482 (5)	1.9327 ± 2.9506 (9)
	Virus	-0.8730 ± 0.7309 (11)	-0.8714 ± 0.5335 (12)
Choice	Fungus	-0.1232 ± 3.0260 (4)	NA
	Virus	NA	-1.1378 ± 0.4513 (17)

Table A3 Rosenthal's values (N_R) for figures 2 and 3. N_R is the hypothetical number of unpublished studies with null results necessary to create a non-significant result.

Treatment	Overall	Predator	Parasitoid	Fungus	Virus
Development	NA	NA	NA	101	NA
Longevity	207	70	108	120	65
Fecundity	320	13	168	NA	262
Survival	105	202	NA	NA	126
Choice	148	NA	179	NA	179

Table A4 Authors (year published), predator, pathogen, and resource from studies used in the meta-analysis.

Authors (year published)	Predator	Pathogen	Resource
Abbas & Boucias (1984)	<i>Podisus maculiventris</i>	AgNPV	<i>Anticarsia gemmatalis</i>
Alma et al. (2007)	<i>Dicyphus hesperus</i>	<i>Paecilomyces fumosoroseus</i>	<i>Dicyphus hesperus</i>
Beegle & Oatman (1975)	<i>Hyposoter exiguae</i>	ThNPV	<i>Trichoplusia ni</i>
Bell et al. (2004)	<i>Podisus maculiventris</i>	<i>Vairimorpha necatrix</i>	<i>Lacanobia oleracea</i>
Boughton et al. (2003)	<i>Heliothis virescens</i>	AcMNPV	<i>Heliothis virescens</i>
Caballero et al. (1990)	<i>Apanteles telengai</i>	AsGV	<i>Agrotis segetum</i>
Caballero et al. (1990)	<i>Campoletis annulata</i>	AsGV	<i>Agrotis segetum</i>
Caballero et al. (1991)	<i>Apanteles telengai</i>	AsGV	<i>Agrotis segetum</i>
Caballero et al. (1991)	<i>Campoletis annulata</i>	AsGV	<i>Agrotis segetum</i>
Caballero et al. (1991)	<i>Aleiodes gasteratus</i>	AsGV	<i>Agrotis segetum</i>
De Nardo et al. (2001)	<i>Podisus nigripinus</i>	AgNPV	<i>Anticarsia gemmatalis</i>
Down et al. (2004)	<i>Podisus maculiventris</i>	<i>Vairimorpha necatrix</i>	<i>Lacanobia oleracea</i>

Down et al. (2004)	<i>Podisus maculiventris</i>	LoGV	<i>Lacanobia oleracea</i>
Down et al. (2009)	<i>Orius laevigatus</i>	<i>Lecanicillium longisporum</i>	<i>Myzus persicae</i>
Down et al. (2009)	<i>Orius laevigatus</i>	<i>Lecanicillium longisporum</i>	<i>Frankliniella occidentalis</i>
Eller et al. (1988)	<i>Microplitis croceipes</i>	HZNVP	<i>Heliothis zea</i>
Escribano et al. (2000a)	<i>Campoletis sonorensis</i>	SfNPV	<i>Spodoptera frugiperda</i>
Escribano et al. (2000b)	<i>Chelonus insularis</i>	SfNPV	<i>Spodoptera frugiperda</i>
Escribano et al. (2000b)	<i>Campoletis sonorensis</i>	SfNPV	<i>Spodoptera frugiperda</i>
Guo et al. (2013)	<i>Meteorus pulchricornis</i>	SeMNPV	<i>Spodoptera exigua</i>
Hoch et al. (2000)	<i>Glyptapanteles liparidis</i>	<i>Vairimorpha</i> spp.	<i>Lymantria dispar</i>
Hoch & Schopf (2001)	<i>Glyptapanteles liparidis</i>	Polydnavirus	<i>Lymantria dispar</i>
Hochberg (1991)	<i>Apanteles glomeratus</i>	PbGV	<i>Pieris brassicae</i>
Jiang et al. (2011)	<i>Microplitis pallidipes</i>	SeMNPV	<i>Spodoptera exigua</i>
Jiang et al. (2014)	<i>Microplitis pallidipes</i>	SfNPV	<i>Spodoptera litura</i>
Kaya (1970)	<i>Apanteles militaris</i>	PuGV	<i>Pseudaletia unipuncta</i>
Kaya & Tanada (1972)	<i>Apanteles militaris</i>	ThGV	<i>Trichoplusia ni</i>
Kaya & Tanada (1972)	<i>Apanteles militaris</i>	PuGV	<i>Spodoptera exigua</i>

Kring et al. (1988)	<i>Oxyopes salticus</i>	AgNPV	<i>Anticarsia gemmatalis</i>
Kyei-Poku & Kunimi (1997)	<i>Cotesia kariyai</i>	Entomopoxvirus	<i>Pseudaletia seperata</i>
Lacey et al. (1997)	<i>Aphelinus asychis</i>	<i>Paecilomyces fumosoroseus</i>	<i>Diuraphis noxia</i>
Lautenschlager et al. (1979)	Birds	LdNPV	<i>Lymantria dispar</i>
Lautenschlager & Podgwaite (1979)	Mice	LdNPV	<i>Lymantria dispar</i>
Levin et al. (1981)	<i>Apanteles glomeratus</i>	PrGV	<i>Pieris rapae</i>
Li et al. (1999)	<i>Solenopsis invicta</i>	AcMNPV	<i>Heliothis virescens</i>
Li et al. (1999)	<i>Geocoris punctipes</i>	AcMNPV	<i>Heliothis virescens</i>
Li et al. (1999)	<i>Hippodamia convergens</i>	AcMNPV	<i>Heliothis virescens</i>
Li et al. (1999)	<i>Solenopsis invicta</i>	HZNVP	<i>Heliothis virescens</i>
Li et al. (1999)	<i>Geocoris punctipes</i>	HZNVP	<i>Heliothis virescens</i>
Li et al. (1999)	<i>Hippodamia convergens</i>	HZNVP	<i>Heliothis virescens</i>
Marti & Hamm (1985)	<i>Geocoris punctipes</i>	<i>Vairimorpha</i> spp.	<i>Spodoptera frugiperda</i>
Matthews (2004)	<i>Meteorus gyrator</i>	LoGV	<i>Lacanobia oleracea</i>
McCutchen et al. (1996)	<i>Microplitis croceipes</i>	AcMNPV	<i>Heliothis virescens</i>
McNitt et al. (1995)	<i>Polistes metricus</i>	AcMNPV	<i>Spodoptera frugiperda</i>

Mesquita et al. (1997)	<i>Aphelinus asychis</i>	<i>Paecilomyces fumosoroseus</i>	<i>Diuraphis noxia</i>
Mesquita & Lacey (2001)	<i>Aphelinus asychis</i>	<i>Paecilomyces fumosoroseus</i>	<i>Diuraphis noxia</i>
Nakai et al. (1997)	<i>Ascogaster reticulatus</i>	AsEPV	<i>Adoxophes</i> spp.
Nusawardani et al. (2005)	<i>Cotesia marginiventris</i>	AcMNPV	<i>Heliothis virescens</i>
Pell & Vandenberg (2002)	<i>Hippodamia convergens</i>	<i>Paecilomyces fumosoroseus</i>	<i>Diuraphis noxia</i>
Perez et al. (2007)	<i>Delphastus pusillos</i>	<i>Lecanicillium lecanii</i>	<i>Trialeurodes vaporariorum</i>
Poprawski et al. (1998)	<i>Serangium parcesetosum</i>	<i>Beauveria bassiana</i>	<i>Bemisia argentifolii</i>
Poprawski et al. (1998)	<i>Serangium parcesetosum</i>	<i>Paecilomyces fumosoroseus</i>	<i>Bemisia argentifolii</i>
Simoes et al. (2012)	<i>Cotesia flavipes</i>	<i>Nosema</i> spp.	<i>Diatraea saccharalis</i>
Ruberson et al. (1991)	<i>Nabis roseipennis</i>	PiNPV	<i>Pseudoplusia includens</i>
Sajap et al. (1999)	<i>Sycanus leucomesus</i>	SINPV	<i>Spodoptera litura</i>
Schuld et al. (1999)	<i>Trichogramma chilonis</i>	<i>Vairimorpha</i> spp.	<i>Plutella xylostella</i>
Simelane et al. (2008)	<i>Coccinella septempunctata</i>	<i>Neozygites fresenii</i>	<i>Aphis gossypii</i>
Smith et al. (2000)	<i>Microplitis croceipes</i>	AcMNPV	<i>Heliothis virescens</i>
Smith et al. (2000)	<i>Microplitis croceipes</i>	HzMNPV	<i>Heliothis virescens</i>
Stoianova et al. (2007)	<i>Euplectrus plathypenae</i>	SeMNPV	<i>Spodoptera erigua</i>

Stoianova et al. (2007)	<i>Euplectrus plathypenae</i>	SfNPV	<i>Spodoptera frugiperda</i>
Vasconcelos et al. (1996)	<i>Harpalus rufipes</i>	MbMNPV	<i>Mamestra brassicae</i>
Vasconcelos et al. (1996)	<i>Pterostichus melanarius</i>	MbMNPV	<i>Mamestra brassicae</i>
Young & Yearian (1987)	<i>Nabis roseipennis</i>	AgNPV	<i>Anticarsia gemmatalis</i>
Young & Yearian (1989)	<i>Microplitis croceipes</i>	HZNPV	<i>Heliothis virescens</i>

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