

Summary of Parasitoid Efficacy by Genera

- 40 peer reviewed scientific journal articles were found relating to efficacy of parasitoids in reducing filth fly populations on beef, dairy, hog, and poultry operations. Spalding uses *Spalangia* and *Muscidifurax* only. Arbico's mix historically is 90% *Nasonia*.
- Table 1 shows the number of articles that found *Spalangia* species, *Muscidifurax* species, and *Nasonia vitripennis* to be good at biological control, bad for biological control, or did not mention the species in regard to biological control.
- Table 2 shows the same values as percentages.
- Table 3 shows percentages based only on the number of articles that mention the species.
- Numbers for *Spalangia* and *Muscidifurax* are based on genera totals due to the fact that multiple species of each genera have been studied; however, results for the different species were similar so I have lumped them all together to make the results more digestible.

Table 1: Number of articles and their evaluation of *Spalangia*, *Muscidifurax*, and *Nasonia* as biological control agents.

	<i>Spalangia</i>	<i>Muscidifurax</i>	<i>Nasonia</i>
Good for biocontrol	25	18	1
Poor for biocontrol	2	5	8
Not mentioned	13	17	31

Table 2: Percentages of articles and their evaluation of *Spalangia*, *Muscidifurax*, and *Nasonia* as biological control agents.

	<i>Spalangia</i>	<i>Muscidifurax</i>	<i>Nasonia</i>
Good for biocontrol	63%	45%	3%
Poor for biocontrol	5%	12%	20%
Not mentioned	32%	43%	77%

Table 3: Percentage of articles evaluating *Spalangia*, *Muscidifurax*, and *Nasonia* as either good or poor for biological control of filth flies.

Genera	Total articles	Good for biocontrol		Poor for biocontrol	
		Number	Percentage	Number	Percentage
<i>Spalangia</i>	27	25	93%	2	7%
<i>Muscidifurax</i>	23	18	78%	5	22%
<i>Nasonia</i>	9	1	11%	8	89%