Table 10. Regression of egg numbers (dissected 5 d after emergence or upon emergence) against various traits in the food treatments. Traits measured in mm. For treatments, BW = buckwheat, IB = Indian blanket, HS = honey solution, and EM = emergence. For traits, Head = head width, Tibia = right metathoracic tibia length, Wing = wing length, Eggs = total eggs at dissection.  $R^2$  = coefficient of determination, and SE = standard error. For P-values, \* = significant at  $\alpha$  = 0.05 and \*\* = significant at  $\alpha$  = 0.01. Emergence = metrics of parasitoids within 24 h of adult emergence.

Treatment	Trait	Mean <u>+</u> SE	$R^2$	Р	Equation
Buckwheat	Head	1.14 <u>+</u> 0.01	0.15	0.22	Egg = -194.20 + (277.33 x Head)
	Tibia	1.12 <u>+</u> 0.01	0.07	0.41	Egg = -48.22 + (153.04 x Tibia)
	Wing	3.24 <u>+</u> 0.04	0.55	0.045*	Egg = -234.00 + (110.16 x Wing)
	Eggs	123.00 <u>+</u> 5.25			
Indian Blanket	Head	1.14 + 0.01	0.00	0.94	Egg = 147.32 – (8.04 x Head)
	Tibia	1.14 + 0.01	0.07	0.35	Egg = $226.50 - (77.68 \times Tibia)$
	Wing	3.20 + 0.03	0.07	0.36	Egg = $229.04 - (28.39 \times \text{Wing})$
	Eggs	138.13 <u>+</u> 3.02			35 (
Honey	Head	1.16 <u>+</u> 0.01	0.08	0.30	Egg = -69.51 + (175.66 x Head)
	Tibia	1.13 <u>+</u> 0.01	0.16	0.12	Egg = -95.32 + (203.31 x Tibia)
	Wing	3.11 <u>+</u> 0.04	0.52	0.002**	Egg =-200.82 + (107.45 x Wing)
	Eggs	133.88 <u>+</u> 6.10			
Water	Head	1.15 <u>+</u> 0.01	0.22	0.21	Egg = -43.41 + (131.77 x Head)
	Tibia	1.13 <u>+</u> 0.01	0.00	0.98	Egg = 106.00 + (2.35 x Tibia)
	Wing	3.15 <u>+</u> 0.00	0.01	0.80	Egg = 79.43 + (9.27 x Wing)
	Eggs	108.67 <u>+</u> 3.45			
Emergence	Head	1.10 + 0.04	0.59	0.009**	Egg = 47.94 + (28.82 x Head)
ze. Beliec	Tibia	1.14 + 0.02	0.01	0.84	Egg = 86.16 – (5.75 x Tibia)
	Wing	3.13 + 0.06	0.51	0.021*	Egg = 27.44 + (16.68 x Wing)
	Eggs	79.60 <u>+</u> 1.39	0.51	3.021	-99 (±0.00 × *********************************

Table 11. Mean  $\pm$  SEM sugar content (µg/insect) of wasps after 24 h of exposure to the treatments following emergence (shown in regular font), and mean  $\pm$  SEM sugar content of buckwheat and Indian blanket nectar and the 5% honey solution (shown in italics). G/F = glucose:fructose ratio and S/H = sucrose: hexose (glucose+fructose) ratio. Differing letters across treatments indicate significant differences (Mann-Whitney U test,  $P \le 0.05$ ).

Treatment		Sug	Sugar ratios			
	Fructose	Glucose	Sucrose	Maltose	G/F	S/H
Parasitoid con	tent					
Buckwheat	0.19 <u>+</u> 0.11	8.46 <u>+</u> 1.37	0.02 <u>+</u> 0.01	0.05 <u>+</u> 0.03	NA	NA
Ind. Blanket	0.23 <u>+</u> 0.11	6.24 <u>+</u> 2.42	0.14 <u>+</u> 0.09	0.13 <u>+</u> 0.08	NA	NA
Honey	0.29 <u>+</u> 0.22	7.12 <u>+</u> 3.45	0.06 <u>+</u> 0.02	0.20 <u>+</u> 0.15	NA	NA
Water	0.07 <u>+</u> 0.03	5.84 <u>+</u> 2.01	0.04 <u>+</u> 0.01	0.08 <u>+</u> 0.05	NA	NA
Food resource	content					
Buckwheat	3.11 <u>+</u> 1.30	3.76 <u>+</u> 0.83	13.14 <u>+</u> 4.31	0.01 <u>+</u> 0.00	2.23 <u>+</u> 0.83	2.10 <u>+</u> 0.36
Ind. Blanket	2.96 <u>+</u> 2.33	5.03 <u>+</u> 2.78	0.83 <u>+</u> 0.23	0.03 <u>+</u> 0.01	8.34 <u>+</u> 6.26	0.34 <u>+</u> 0.21
Honey	163.8 <u>+</u> 57.86	158.8 <u>+</u> 40.18	13.17 <u>+</u> 2.95	1.19 <u>+</u> 0.30	1.19 <u>+</u> 0.30	0.04 <u>+</u> 0.00
Water	NA	NA	NA	NA	NA	NA

## **Figure Captions**

Fig.6. Longevity of *A. rufotestaceus* fed on different food treatments. Bars with different letters are significantly different (Ryan-Einot-Gabriel-Welsch Multiple Range, P < 0.05). Numbers above bars are numbers of individuals used for respective treatments.

Fig.7. Fecundity of *A. rufotestaceus* at emergence and after five days of feeding on different food treatments. Bars with different letters are significantly different (Ryan-Einot-Gabriel-Welsch Multiple Range, P < 0.05). Numbers above bars are numbers of individuals dissected for the respective treatments.



