

Supplementary Information

Table S1. Results of larval size category bioassay and substrate bioassay to assess suitability of SCG for BSF development (see also Figures 1 and 2)

Treatments	Larval survival (proportion) ^{1,2}	Cohort weight change (absolute) ²	Cohort weight change (proportional) ²
Weight at start (mg)			
3	0.69±0.07 ^a	470.37±121.32 ^c	1.94±0.24 ^c
6	0.89±0.02 ^b	351.92±69.58 ^c	1.70±0.07 ^{bc}
18	0.99±0.02 ^b	162.28±31.49 ^{ab}	1.32±0.04 ^{ab}
30	0.96±0.04 ^b	20.33±37.62 ^a	1.04±0.08 ^a
40	0.98±0.02 ^b	60.79±31.82 ^a	1.12±0.05 ^a
F _{4,26} -value ³	6.342 (0.002)	13.453 (0.001)	13.407 (0.001)
Substrate type			
SCG	0.96±0.05	94.06±70.70 ^a	1.20±0.25 ^a
SCG + bran	0.98±0.03	1087.64±209.96 ^b	3.11±0.41 ^b
Bran	0.97±0.07	1486.70±311.64 ^c	3.87±0.71 ^c
F _{2,18} -value	0.415 (0.668)	63.321 (0.001)	46.807 (0.001)

1: For substrate experiment 100% of surviving larvae on SCG+bran and bran substrates emerged as prepupae, but 0% on SCG substrate; 2: lowercase letters indicate homogenous treatment groups (Tukey > 0.05); 3: Numbers in parentheses are P-values

Table S2. Results from univariate GLMs for no-choice, multichoice and binary choice bioassays with two slug species feeding on lettuce leaf disks (see also Figures 5 and 6)

Bioassay and species	Period	F-values ¹	P-values
No-choice		F-value 4,30	P-value
<i>A. ater</i>	Day	6.758	<0.001
<i>A. ater</i>	Night	4.396	0.010
<i>D. reticulatum</i>	Day	0.718	0.570
<i>D. reticulatum</i>	Night	4.982	0.006
Multichoice			
<i>A. ater</i>	Day	8.302	<0.001
<i>A. ater</i>	Night	21.936	<0.001
<i>D. reticulatum</i>	Day	14.29	<0.001
<i>D. reticulatum</i>	Night	22.693	<0.001
Binary choice (differences)²		F-value 3.24	P-value
<i>A. ater</i>	Day	2.608	0.080
<i>A. ater</i>	Night	1.255	0.317
<i>D. reticulatum</i>	Day	1.160	0.350
<i>D. reticulatum</i>	Night	9.075	0.001

1: DF = 4,30 for no-choice and multichoice bioassays and 3,34 for binary choice bioassays; 2: Comparisons for binary choice bioassays are based on differences between slug damage to leaf disks over control and treated soils. (see also Table S3)

Table S3. Results from paired t-tests comparing leaf disk damage over soil (controls) and amended soils. (see also Figure 6)

Species	Period	SCG age (application method) ¹	t-statistics ²	P-values
<i>A.ater</i>	Day	8-month (M)	-0.427	0.687
<i>A.ater</i>	Day	8-month (L)	2.374	0.064
<i>A.ater</i>	Day	1-month (M)	6.907	0.001
<i>A.ater</i>	Day	1-month (L)	5.002	0.004
<i>A.ater</i>	Night	8-month (M)	0.095	0.928
<i>A.ater</i>	Night	8-month (L)	1.690	0.152
<i>A.ater</i>	Night	1-month (M)	4.689	0.005
<i>A.ater</i>	Night	1-month (L)	5.174	0.004
<i>D.reticulatum</i>	Day	8-month (M)	1.097	0.323
<i>D.reticulatum</i>	Day	8-month (L)	2.513	0.054
<i>D.reticulatum</i>	Day	1-month (M)	15.806	0.001
<i>D.reticulatum</i>	Day	1-month (L)	6.200	0.002
<i>D.reticulatum</i>	Night	8-month (M)	-0.302	0.775
<i>D.reticulatum</i>	Night	8-month (L)	5.934	0.002
<i>D.reticulatum</i>	Night	1-month (M)	9.125	0.001
<i>D.reticulatum</i>	Night	1-month (L)	9.676	0.001

1: M = mixed, L = layered; 2: N = 5

Table S4. Results from GLMs for radish growth and development associated with the five substrate-types corresponding to Figure 7. (see also Figure S1)

Parameter	Df	F-values	P-values
Seedling survival	4,60	2.238	0.077
Plant height	4,60	8.743	0.001
Number of leaves (development)	4,60	6.562	0.001
Greenness	4,60	25.108	0.001

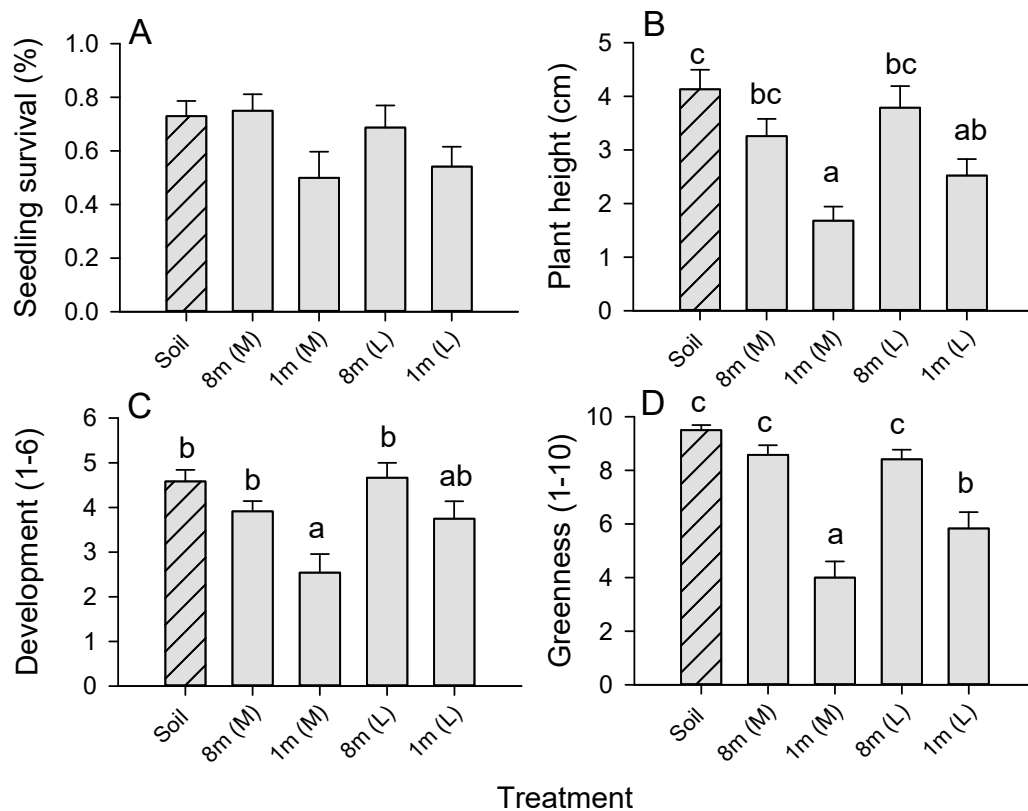


Figure S1. Growth of radish seedlings in soil with SCG amendments. Results for seedling survival (A), plant height (B) development (C) and greenness (D) are presented for plants grown in unamended soil (hatched bars) and soil with SCG amendments (solid bars). Amendments included 8- and 1-month-old SCG. Each amendment was applied either mixed with the soil (M = light gray bars) or as a layer on top of the soil (L = dark gray bars). Results of GLMs are indicated in Table S4. Lowercase letters indicate homogenous substrate groups (Tukey $p > 0.05$). Standard errors are indicated (N = 8).