## **Supplementary Information**

Figure S1 The gene copies of A) tet genes, B) sul genes, C) qnr genes and D) 16S rRNA normalized to dry weight of samples. The samples were collected on day 0 (C-0), day 3 (C-3), and day 6 (C-6) random stockpiling of raw fresh manure as controls and on day 1 (T-1), day 3 (T-3), day 5 (T-5), and day 6 (T-6) housefly larvae (Musca domestica) vermicomposting of raw fresh manure as the treatment. Error bars are standard deviations (n = 3). Different letters listed above error bars indicate significant (p < 0.05) differences in gene copies of ARGs and 16S rRNA between different vermicomposting days and controls using S-N-K test for multiple comparison, following a significant One-way repeated-measures ANOVA.

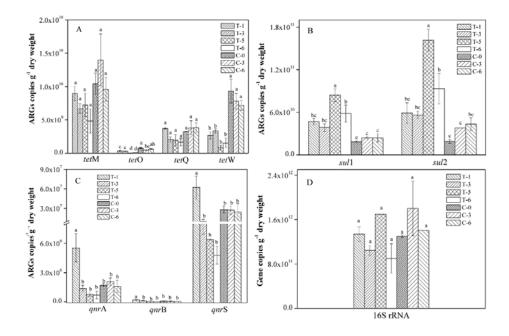


Table S1 The selected environmental factors measured in samples collected in unprocessed fresh manure (C-0), in manure under traditional composting without larvae on day 3 (C-3), and day 6 (C-6), and in manure under larvae-treated vermicomposting on day 1 (T-1), day 3 (T-3), day 5 (T-5), and day 6 (T-6). Standard deviations of the mean are presented in brackets (n = 3). Various colors per row represent significant differences in these parameters at 0.05 levels among different sampling times.

|                    | T-1         | T-3         | T-5         | T-6         | C-0         | C-3         | C-6         |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Organic matter (%) | 90.8 (0.5)  | 89.1 (0.7)  | 82.38 (1.1) | 84.2 (0.5)  | 91.1 (1.4)  | 90.3 (1.1)  | 89.4 (1.0)  |
| Total nitrogen (%) | 3.35 (0.06) | 3.25 (0.08) | 2.98 (0.03) | 2.60 (0.03) | 3.48 (0.07) | 3.77 (0.29) | 3.61 (0.14) |
| pH                 | 6.51 (0.08) | 8.34 (0.00) | 8.68 (0.03) | 8.46 (0.04) | 6.68 (0.03) | 6.73 (0.06) | 6.73 (0.04) |
| Temperature (°C)   | 31.7 (0.6)  | 36.7 (1.5)  | 47.7 (0.6)  | 33.0 (2.6)  | 28.3 (0.6)  | 29.0 (1.0)  | 30.6 (0.1)  |
| Water content (%)  | 71.7 (0.8)  | 71.7 (2.5)  | 64.6 (1.6)  | 65.9 (1.8)  | 81.4 (2.2)  | 79.4 (2.7)  | 79.6 (2.4)  |

