

Figure S1: Larval length in mm for insect samples after different cooling periods. a) larvae of corpse 3 after 40 hours and 160 hours of cooling. b) larvae of corpse 4 after 14 and 280 hours of cooling. The asterisk indicates significant differences with p < 0.001.

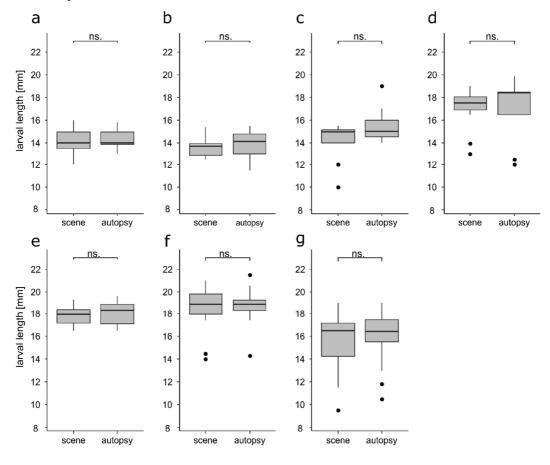


Figure S2: Larval length in mm for insect samples from the crime/death scene and the autopsy. **a)** larvae of *L. sericata* (both n = 16) from case 16 after 0 and 6 days of cooling; **b)** larvae of *L. sericata* (both n = 20) from case 18 after 0 and 7 days of cooling; **c)** larvae of *L. sericata* (both n = 16) from case 19 after 0 and 6 days of cooling; **d)** larvae of *C. vicina* (both n = 20) from case 8 after 0 and 10 days of cooling; **e)** larvae of *C. vicina* (both n = 10) from case 14 after 0 and 6 days of cooling; **f)** larvae of *C. vicina* (both n = 36) from case 28 after 0 and 7 days of cooling; g) larvae of *Ch. albiceps* (both n = 50) from case 21after 0 and 4 days of cooling

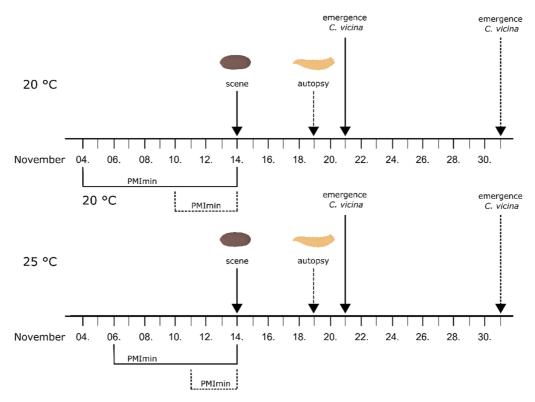


Figure S3:Comparison of scene-based and autopsy-based PMI_{min} estimations with temperature of 20 °C ad 25 °C. The time line shows the events (scene collection, autopsy collection) and the emergence of scene-collected and autopsy collected *C. vicina*. The solid line represent the scene-based PMI_{min} and the dashed line the autopsy-based PMI_{min}.

Table S1: Insect species found on the seven bodies. A checkmark indicates if the species was found on the body

Species	2	3	4	5	6	7	8
C. vicina	✓	✓					
C. vomitoria		\checkmark					
Ch. albiceps			\checkmark				
L. ampullacea	\checkmark						
L. sericata	\checkmark						
P. regina		\checkmark	\checkmark	\checkmark			\checkmark
P. terraenovae		\checkmark		\checkmark			
S. argyrostoma		✓	✓				