Claims

1. A pest trap comprising:

a main body;

a first chamber connected to the main body, the first chamber comprising an opening arranged to allow a pest to enter the first chamber;

a movable closure to the opening of the first chamber;

a second chamber connected to the main body, the second chamber comprising an opening arranged to allow a pest to enter the second chamber;

a movable closure to the opening of the second chamber;

a sensor mechanism arranged to detect the presence of a pest in the first chamber or second chamber;

a kill mechanism arranged, when activated, to release a fluid into the first chamber or second chamber to kill a pest within the first chamber or second chamber;

wherein the pest trap is arranged, in response to the sensor mechanism detecting the presence of a pest in the first chamber, to close the movable closure to the opening of the first chamber, and to activate the kill mechanism to release the fluid into the first chamber; and

wherein the pest trap is arranged, in response to the sensor mechanism detecting the presence of a pest in the second chamber, to close the movable closure to the opening of the second chamber, and to activate the kill mechanism to release the fluid into the second chamber.

2. A pest trap as claimed in claim 1, wherein the first chamber is located on a first face of the main body, and the second chamber is located on a second face of the main body.

3. A pest trap as claimed in claim 2, wherein the first face of the main body is opposite the second face of the main body.

4. A pest trap as claimed in any preceding claim, wherein the first chamber is removably attached to the main body.

5. A pest trap as claimed in any preceding claim, wherein the main body comprises the kill mechanism.

6. A pest trap as claimed in any preceding claim, wherein the main body comprises the movable closure to the opening of the first chamber.

~~7. A pest trap as claimed in any preceding claim, wherein the fluid is carbon dioxide gas.~~

~~8~~7. A pest trap as claimed in any preceding claim, wherein the kill mechanism comprises:

a first vessel containing the fluid for release into the first chamber;

~~, and~~ a second vessel containing the fluid for release into the second chamber;~~.~~

~~9. A pest trap as claimed in claim 8, wherein the kill mechanism comprises:~~

a first piercing mechanism comprising a first biased lance and a first latch that holds the first biased lance in an armed position, wherein when the first latch is released, the first biased lance penetrates the first vessel to release the fluid therein into the first chamber; and

a second piercing mechanism comprising a second biased lance and a second latch that holds the second biased lance in an armed position, wherein when the second latch is released, the second biased lance penetrates the second vessel to release the fluid therein into the second chamber.

~~10~~8. A pest trap as claimed in claim ~~9~~7, wherein the kill mechanism further comprises a rotary motor, and is arranged so that when the motor is driven in a first

direction, it releases the first latch; and when the motor is driven in the opposite direction, it releases the second latch.

~~11~~9. A pest trap as claimed in ~~any of~~ claim~~s 8 to 10~~ 7 or 8, wherein the end of the first biased lance that penetrates the first vessel is a tapered cross-shape in cross-section.

~~12~~10. A pest trap as claimed in any preceding claim, wherein the sensor mechanism is removably attached to the main body.

~~13. A pest trap as claimed in claim 12, wherein the main body comprises at least one rotatable arm, the rotatable arm being movable between a locked position in which the sensor mechanism is held in place on the main body, and an unlocked positon in which the sensor mechanism can be removed from the main body.~~

~~14. A pest trap as claimed in claim 12 or 13, wherein the sensor mechanism detects the presence of a pest in the first chamber or second chamber using an infrared sensor.~~

~~15. A pest trap as claimed in claim 12 or 13, wherein the sensor mechanism detects the presence of a pest in the first chamber or second chamber using an ultrasound sensor.~~

~~16. A pest trap as claimed in claim 12 or 13, wherein the sensor mechanism detects the presence of a pest in the first chamber or second chamber by sensing movement of a movable arm that extends into the first chamber or second chamber.~~

~~17~~11. A pest trap comprising:

a main body;

a chamber connected to the main body, the chamber comprising an opening arranged to allow a pest to enter the chamber;

a movable closure to the opening of the chamber;

a sensor mechanism arranged to detect the presence of a pest in the chamber;

a kill mechanism comprising:

a vessel containing fluid,

a piercing mechanism comprising a biased lance and a latch that holds the biased lance in position, wherein when the latch is released, the biased lance penetrates the vessel to release the fluid therein into the chamber;

wherein the pest trap is arranged, in response to the sensor mechanism detecting the presence of a pest in the chamber, to close the movable closure to the opening of the first chamber, and to release the latch of the piercing mechanism so that the fluid in the vessel is released into the chamber to kill the pest detected within the chamber; and

wherein the end of the biased lance that penetrates the vessel is a tapered cross-shape in cross-section.

~~18. A pest trap as claimed in claim 17, wherein the chamber is removably attached to the main body.~~

~~19. A pest trap as claimed in claim 17 or 18, wherein the main body comprises the kill mechanism.~~

~~20. A pest trap as claimed in any of claims 17 to 19, wherein the main body comprises the movable closure to the opening of the chamber.~~

~~21~~12. A pest trap as claimed in ~~any of~~ claim~~s 17 to 20~~11, wherein the fluid is carbon dioxide gas.

~~22. A pest trap as claimed in any of claims 17 to 21, wherein the sensor mechanism is removably attached to the main body.~~

~~23. A pest trap as claimed in claim 22, wherein the main body comprises at least one rotatable arm, the rotatable arm being movable between a locked position in which the sensor mechanism is held in place on the main body, and an unlocked positon in which the sensor mechanism can be removed from the main body.~~

~~24. A pest trap as claimed in claim 22 or 23, wherein the sensor mechanism detects the presence of a pest in the chamber using an infrared sensor.~~

~~25. A pest trap as claimed in claim 22 or 23, wherein the sensor mechanism detects the presence of a pest in the chamber using an ultrasound sensor.~~

~~26. A pest trap as claimed in claim 22 or 23, wherein the sensor mechanism detects the presence of a pest in the chamber by sensing movement of a movable arm that extends into the chamber.~~

~~27~~13. A pest trap comprising:

a main body;

a chamber connected to the main body, the chamber comprising an opening arranged to allow a pest to enter the chamber;

a movable closure to the opening of the chamber;

a sensor mechanism arranged to detect the presence of a pest in the chamber;

a kill mechanism arranged, when activated, to release a fluid into the chamber to kill a pest within the chamber;

wherein the pest trap is arranged, in response to the sensor mechanism detecting the presence of a pest in the chamber, to close the movable closure to the opening of the chamber, and to activate the kill mechanism to release the fluid into the chamber; and

wherein the sensor mechanism is removably attached to the main body.

~~28~~14. A pest trap as claimed in claim ~~27~~13, wherein the main body comprises at least one rotatable arm, the rotatable arm being movable between a locked position in which the sensor mechanism is held in place on the main body, and an unlocked positon in which the sensor mechanism can be removed from the main body.

~~29~~15. A pest trap as claimed in claim ~~27~~13 or ~~28~~14, wherein the sensor mechanism detects the presence of a pest in the chamber using an infrared sensor.

~~30~~16. A pest trap as claimed in claim ~~27~~13 or ~~28~~14, wherein the sensor mechanism detects the presence of a pest in the chamber using an ultrasound sensor.

~~31~~17. A pest trap as claimed in claim ~~27~~13 or ~~28~~14, wherein the sensor mechanism detects the presence of a pest in the chamber by sensing movement of a movable arm that extends into the chamber.

~~32. A pest trap as claimed in any of claims 27 to 31, wherein the chamber is removably attached to the main body.~~

~~33. A pest trap as claimed in any of claims 27 to 32, wherein the main body comprises the kill mechanism.~~

~~34. A pest trap as claimed in any of claims 27 to 33, wherein the main body comprises the movable closure to the opening of the chamber.~~

~~35. A pest trap as claimed in any of claims 27 to 34, wherein the fluid is carbon dioxide gas.~~

~~36. A pest trap as claimed in any of claims 27 to 35, wherein the kill mechanism comprises a vessel containing the fluid for release into the chamber.~~

~~37. A pest trap as claimed in claim 36, wherein the kill mechanism comprises a piercing mechanism comprising a biased lance and a latch that holds the biased lance in position, wherein when the latch is released, the biased lance penetrates the vessel to release the fluid therein into the chamber.~~

~~38~~18. A kit of parts comprising a pest trap as claimed in any of claims ~~27~~13 to ~~37~~17, and at least two sensor mechanisms that are arranged to detect the presence of a pest using different physical properties.

~~39~~19. A kit of parts as claimed in claim ~~38~~18, wherein the at least two sensor mechanisms detect the presence of a pest in the chamber using physical properties taken from the set of: infrared waves; ultrasonic waves; movement of a movable arm.

~~40~~20. A method of setting a pest trap as claimed in any of claims ~~27~~13 to ~~37~~17, comprising the steps of:

selecting a sensor mechanism from a plurality of sensor mechanisms that are arranged to detect the presence of a pest using different physical properties;

attaching the selected sensor mechanism to the pest trap.