ABSTRACT

SMART INSECT TRAP

A smart insect trap comprising: a sensing portion having a through opening and an assembly of sensors configured to capture a signature of signals that are generated consequent to passage of an insect through the through opening, wherein the signature of signals is used by a processor of the sensing portion to identify at least one of: a type, a species, a subspecies, and a sex of the insect; a trapping portion in fluid communication with the through opening, the trapping portion comprising a container configured to hold water therein and a number of killing mechanisms provided to kill insects in the container; a controller in communication with the processor and configured to activate the number of killing mechanisms in response to identification by the sensing portion of at least one of: a predetermined type, a predetermined species, a predetermined subspecies and a predetermined sex of the insect; a water refilling mechanism for refilling water in the container, the water refilling mechanism comprising a water storage tank provided in fluid communication with the container, wherein the water storage tank is activatable by the controller to release water into the container upon detection of the water level in the container being below the predetermined water level by a water level sensor.

FIG. 1A