CLAIMS

1. A trap (10) for catching or killing insects comprising
   a. a back housing (12);
   b. an insect capture or killing means (100) disposed in front of the back housing
   c. an insect attracting light source (22) comprising light emitting diodes (LED's) which emit ultra violet (UV) radiation; and
   d. a cover (16), comprising openings (18) allowing insects to enter the trap, through which insect attracting light is dispersed;
   wherein the light source (22) is directed immediately inwardly through plus or minus 45 degrees, by the natural configuration of the LED or by the use of guides or baffles which channel the light in the desired direction, towards the insect capture or killing means (100) and is precluded from being directed immediately outwardly through the cover (16).

2. A trap as claimed in claim 1 wherein the LED's are housed in a carrying member(s) (24).

3. A trap as claimed in claim 2 wherein the carrying member(s) (24) is shaped such that the light emitted is splayed to a plane (X-X) of the back housing and insect capture means.

4. A trap as claimed in claim 3 wherein the splay is up to 30 degrees towards the insect capture or killing means and/or the cover.

5. A trap as claimed in any of the preceding claims wherein an array of LEDs (22) are mounted in front of the back housing (12) and insect capture means (100), and behind the cover (16), on a mount (14).

6. A trap as claimed in claim 5 wherein the mount (14) is positioned at, or inset from, a perimeter (20) of the back housing, and comprise one or two pairs (24a; 24b) of facing LED carrying members (24), or is of a substantially circular or other configuration, such that the LED's are orientated in facing relationship to direct light to the centre (26) of the trap.

7. A trap as claimed in claim 6 wherein the LED carrying member(s) (24) is/are substantially U shaped to preclude light from being directed immediately outwardly through the cover (16) or immediately inwardly onto the insect capture means (100).

8. A trap as claimed in any of the preceding claims further comprising reflectors (44) which are seated in front of the insect trapping means and behind or in front of the lighting means.

9. A trap as claimed in any of the preceding claims comprising 30-40 LEDs.

10. A trap as claimed in any of the preceding claims which is a SMART internet enabled trap.

11. A method of attracting flying insects to an insect trap comprising diffusing light emitted by light emitting diodes (LEDS) which emit ultra violet (UV) radiation wherein the light source (22) is directed immediately inwardly through plus or minus 45 degrees, by the natural configuration of the LED or by the use of guides or baffles which channel the light in the desired direction, towards an insect capture or killing means (100) and is precluded from being directed immediately outwardly through a cover (16).