

Claims

1. A system for rearing insect larvae, the system comprising:
a waste management module configured to receive organic waste and to convert the organic waste into a feed for insect larvae; and
at least one rearing module configured to handle a plurality of trays of larvae and to provide the feed to the trays;
wherein the feed is supplied from the waste management module to each of the at least one rearing module, and
wherein each of the at least one rearing modules comprises a respective transportable container.
2. The system of claim 1, wherein the waste management module comprises a transportable container.
3. The system of claim 1 or 2, wherein each transportable container comprises a shipping container.
4. The system of any preceding claim, further comprising:
at least one tube for supplying the feed from the waste management module to each of the at least one rearing module.
5. The system of any preceding claim, wherein the at least one rearing module comprises at least two rearing modules.
6. The system of claim 5, wherein the at least one rearing module comprises between four and ten modules.
7. The system of claim 5, wherein the at least one rearing module comprises between 10 and 20 modules.
8. A rearing module for rearing insect larvae, the module comprising:
a container, the container housing:
a tray handling system arranged to receive trays or a stack of trays at a loading/unloading point and to move the trays or the stack of trays; and

a feed delivery system configured to deliver feed received from outside the container to each tray repeatedly over a period of time;
wherein the container is a transportable container.

9. The rearing module of claim 8, further comprising:
a heating, ventilation, and air conditioning system for controlling the temperature of the interior of the container.
10. The rearing module of claim 8 or 9, wherein the tray handling system is arranged to move the trays or the stack of trays around a closed path.
11. The rearing module of claim 10, wherein the closed path is generally rectangular.
12. The rearing module of any one of claims 8 to 11, wherein the tray handling system includes ball transfer units.
13. The rearing module of any one of claims 8 to 12, wherein the tray handling system includes rollers.
14. The rearing module of any one of claims 8 to 13, wherein the tray handling system includes tray carriers having wheels or casters.
15. The rearing module of any one of claims 8 to 14, wherein the tray handling system includes guide rails.
16. The rearing module of any one of claims 8 to 15, arranged such that trays or stacks of trays are insertable into and removeable from the tray handling system using a forklift truck.
17. The rearing module of any one of claims 8 to 16, wherein the feed delivery system comprises one or more arms for delivering feed, wherein each arm is arranged such that a corresponding tray passes under the arm.
18. The rearing module of any one of claims 8 to 17, wherein transportable container is a shipping container.

19. A method of installing a system for rearing insect larvae, the method comprising:
- providing a waste management module configured to receive organic waste and to convert the organic waste into a feed for insect larvae;
 - providing at least one rearing module configured to handle a plurality trays of larvae and to provide the feed to the trays; and
 - arranging for feed to be supplied from the waste management module to each of the at least one rearing modules,
- wherein each of the at least one rearing modules comprises a respective transportable container.
20. A method of claim 19, wherein providing the waste management module includes delivering the waste management module substantially prefabricated to a site.
21. A method of claim 19 or 20, wherein providing the at least one rearing module includes delivering each rearing module substantially prefabricated to a site.
22. A method of operating a system for rearing insect larvae, the method comprising:
- a waste management module:
 - receiving organic waste and converting the organic waste into a feed for insect larvae and delivering the feed to the insect larvae to at least one rearing module via a tube or respective tube; and
 - each rearing module:
 - moving trays or stacks of trays and repeatedly delivering feed to the trays or the stacks of trays,
- wherein each of the at least one rearing modules comprises a respective transportable container.
23. A method according to claim 22, further comprising:
- monitoring the waste management module and/or the rearing module; and
 - providing control signals to the waste management module and/or the rearing module.