## Claims

1. An agricultural system comprising a plurality of trays, each tray being suitable for holding a substrate in which a crop can grow, a structure for supporting the plurality of trays in a stacked arrangement, the system further comprising a lighting system for delivering light to the crops and a nutrient supply system for supplying nutrients to the crops and at least one service module for lifting a selected tray and for moving the selected tray relative to the frame and the other trays along any one of a plurality of preconfigured paths, wherein the service module comprises an internal power source for powering said lifting of the selected tray and moving of the selected tray along a path.

2. The agricultural system according to claim 1 wherein the structure and the service modules are configured so that the service module is positioned below the selected tray prior to lifting.

3. The agricultural system according to claim 2 wherein the service module comprises a lifter for engaging the selected tray from below and lifting and lowering the selected tray.

4. The agricultural system according to claim 3 wherein the lifter comprises one or more sets of arms arranged in a scissor formation.

5. The agricultural system according to any preceding claim wherein the stacked arrangement extends both horizontally and vertically.

6. The agricultural system according to any preceding claim, further comprising a plurality of service modules.

7. The agricultural system according to claim 6 wherein each service module is configured to lift and move a selected tray along a preconfigured path wherein a first preconfigured path for a first service module is distinct from a second preconfigured path for a second service module.

8. The agricultural system according to any preceding claim wherein each

service module comprises at least one camera.

9. The agricultural system according to claim 8 wherein the camera is directed downwards so that the camera is able to capture image information relating to crops located below the service module.

10. The agricultural system according to claim 8 or claim 9 wherein the camera captures image information in the visual, ultra-violet and/or infra-red bands.

11. The agricultural system according to any preceding claim wherein the service module may comprises one of more of a carbon dioxide sensor, a temperature sensor and a humidity sensor.

12 The agricultural system according to any preceding claim wherein each tray comprises a unique label.

13. The agricultural system according to claim 12 wherein the service module comprises a label reader for identifying each tray by the corresponding label.

14. The agricultural system according to any preceding claim wherein the service modules comprises a locomotion system, the locomotion system comprising a plurality of wheels, at least one of which is powered by the internal power source.

15. The agricultural system according to any preceding claim wherein the service module comprises an odometer for measuring a distance travelled by the service module.

16. The agricultural system according to any preceding claim wherein the service module comprises a blowing arrangement for blowing air downwards as the service module moves.

17. The agricultural system according to any preceding claim further comprising one or more stations comprising one or more of a harvesting station, a cleaning station and a planting station.

18. The agricultural system according to claim 17 wherein the service

module transports the tray between the structure and the one or more stations, and between the stations where there is more than one station.

19. The agricultural system according to according to any preceding claim comprising one or more rails defining one or more paths for the service module.

20. The agricultural system according to claim 18 wherein the rails additionally act to support the trays within the structure.

21. The agricultural system according to any preceding claim comprising one or more service module lifts to move the service modules vertically relative to the structure.

22. An agricultural system comprising a plurality of trays, each tray being suitable for holding a substrate in which a crop can grow, a structure for supporting the plurality of trays in a stacked arrangement, the system further comprising a lighting system for delivering light to the crops and a nutrient supply system for supplying nutrients to the crops and at least one service module for lifting a selected tray and for moving the selected tray relative to the frame and the other trays along any one of a plurality of preconfigured paths, wherein the structure and the service modules are configured so that the service module is positioned below the selected tray prior to lifting and wherein the service module comprises a lifter for engaging the selected tray from below and lifting and lowering the selected tray.

23. A method of moving a tray within an agricultural system, the agricultural system comprising a plurality of trays, each tray being suitable for holding a substrate in which a crop can grow and a structure for supporting the plurality of trays in a stacked arrangement, the system further comprising a lighting system for delivering light to the crops and a nutrient supply system for supplying nutrients to the crops and at least one service module, the method comprising lifting a selected tray from below using a service module positioned below the tray and using the service module to move the selected tray relative to the frame and the other trays along any one of a plurality of preconfigured paths.

24. The method according to claim 23 wherein the structure extends both vertically and horizontally, the structure defining the plurality of preconfigured paths, at least one of which comprises a vertical component, wherein the method comprises lifting the tray to follow the vertical component of the preconfigured path.

25. The method according to claim 23 or claim 24 further comprising using the service module to collect data relating to the agricultural system while the service module moves through the system.

26. The method according to claim 25 wherein the data collected by the service module may include one or more of images, temperature, carbon dioxide concentration, lighting intensity and/or colour, humidity, etc.

27. The method according to any of claims 23 to 26 wherein the service module further comprises a blower, the method further comprising blowing air downwards using the blower as the service module moves through the structure.