

CLAIMS:

1. An environmental control and transport system for agricultural products comprising:

a shipping container comprising at least one zone for containing an agricultural product therein, wherein the shipping container is a self-powered electric unit; and

an evaporator operatively coupled to the shipping container;

a controller operatively associated with the evaporator, the controller controlling at least one environmental condition of the at least one zone,

wherein the at least one environmental condition comprises at least one of lighting quality, carbon dioxide and ethylene.

2. The environmental control and transport system of claim 1, further comprising a hydroponics system disposed in the shipping container for growth of the agricultural product, the hydroponics system comprising at least one hydroponics support for supporting the agricultural product, wherein respiration loads produced by the agricultural product is condensed by the evaporator to form condensate that supplements the hydroponics system.

3. The environmental control and transport system of claim 1 or 2, wherein the at least one zone of the shipping container comprises a plurality of zones, wherein the at least one environmental condition of each of the zones are independently controllable with the evaporator.

4. The environmental control and transport system of any of the preceding claims, further comprising a control device in wireless communication with the evaporator, the control device providing a user control over the at least one environmental condition within the shipping container.

5. The environmental control and transport system of claim 4, wherein the control device is in wireless communication with at least one condition detector disposed in the shipping container to monitor the environmental condition of the at least one zone within the shipping container.

6. The environmental control and transport system of any of the preceding claims, wherein the shipping container includes at least one data collection device in wireless communication with a cloud data storage system for tracking environmental conditions of the shipping container and growth of the agricultural product.

7. The environmental control and transport system of any of the preceding claims, further comprising a lighting system disposed within the shipping container.

8. The environmental control and transport system of claim 7, wherein the lighting system is powered by the shipping container.

9. The environmental control and transport system of claim 7 or claim 8, wherein the lighting system comprises a plurality of LEDs.

10. The environmental control and transport system of claim 9, the lighting system comprising a plurality of light spectrum analyzers manually or wirelessly connected to a system controller and configured to adjust the plurality of LEDs for optimized agricultural growth.

11. The environmental control and transport system of any of the preceding claims, wherein the shipping container includes a plurality of wheels for transport of the agricultural product.

12. A method of agricultural product growth and transport comprising:
growing an agricultural product within a shipping container with a hydroponics system disposed in the shipping container;

controlling at least one environmental condition with a controller operatively associated with an evaporator mounted to the shipping container, wherein the at least one environmental condition comprises at least one of lighting quality, carbon dioxide and ethylene; and

transporting the agricultural product to a destination within the shipping container.

13. The method of claim 12, further comprising independently controlling the at least one environmental condition of a plurality of zones of the shipping container to selectively provide distinct growing conditions for the agricultural product.

14. The method of claim 12 or 13, further comprising condensing respiration loads from the agricultural product to form a condensate that supplements the hydroponics system.

15. The method of any one of claims 12-14, further comprising controlling the evaporator with a device wirelessly connected to the evaporator.

16. The method of any one of claims 12-15, further comprising:
collecting data with a data collection device disposed within the shipping container;
and

transporting the data collected to a cloud storage device.