

METHOD AND SYSTEM FOR AUTOMATED INDOOR VERTICAL CULTIVATION OF PLANTS

ABSTRACT

Disclosed is method for automated indoor vertical cultivation of plants. Method comprises supplying seeds, plant cuttings, or plant tissue culture, to indoor vertical cultivation system, comprising at least one cultivation rack configured to house multiple habitats configured to grow plants under optimal growth conditions unique to plant therein. Moreover, method comprises operating: electrical power converter module of power converter to provide electrical power for operating said system; dehumidification module of dehumidification arrangement for producing water necessary for cultivation and harvesting of plant; and software module for measuring, controlling and monitoring, based on data associated with plant obtained from database, optimal growth conditions in multiple habitats that is capable of continual learning and improvement. Software module is configured to operate water supply arrangement, root chamber environment modulation arrangement, light supply arrangement, air conditioning arrangement, and air sanitization arrangement, operatively coupled to each of multiple habitats that are on different harvest schedule.

[FIG. 1]