Claims

1. A light control method for the cultivation of plants, comprising the steps of:
a) being provided with apparatus for the cultivation of plants comprising one or more pots, one or more plants (17), one or more light sources (6) the or each light source (6) comprising a first light spot (7), and a second light spot (8) spaced apart from the first light spot (7);
b) preparing the or each pot with rooting points of the or each plant (17) that cause a normal vertical growth axis of the or each plant (17) to tilt off from the vertical in the range of 10-89 degrees; and
c) arranging the or each light source (6) to be vertical or tilted from the vertical axis not exceeding or equal to 50 degrees with respect to the vertical axis of the or each pot;
d) arranging the first light spot (7) and the second light spot (8) to emit the light (9) in all directions, so that the or each plant (17) can grow on a pot with a root point of the plant tilted from the vertical with the apex (13) of the plant (17) growing in the direction of the first light source (7) rather than towards the light spot (8), the leaves (14) at the top and near the apex (13) of the plant (17) being fully exposed to light from the light spot (8), whilst the leaves (15) that are covered by the leaves (14) at the top and near the apex (13), will receive light (9) from the light source (6) in two ways, directly from the first light spot (7) and from the light spot (8), and indirectly, those leaves around the base of the leaf plant (16) receiving reflected light (9) from the impact of light from the pot surface (11).

2. The light control method in accordance with claim 1, wherein the or each light source (6) uses a type of the light emitting diode.

3. The light control method in accordance with claim 1 and 2, wherein the or each pot is made from Polyvinyl Chloride, Polyethylene, Polypropylene, 316L Stainless Steel, Stainless steel 304, or stainless steel grade 308.

4. The light control method in accordance with any one of claim 1- 3, wherein the color of the or each pot can be given the density of photosynthetic photon flux density (PPFD) within the cultivation area from 100-1000 micron mol / sqr.m. sec.

5. The light control method in accordance with any one of claims 1- 4, wherein the or each light source (6) possesses a spacing of the light spots (7) and (8) in the range of 2 - 20 cm.

6. The light control method in accordance with any one of claims 1- 5, wherein a spacing between the root points of each plant in the pots cause the normal vertical growth axis of the plant to tilt off from the vertical and the root points of each plant (17) is in the range of 20 - 60 cm.

7. The light control method in accordance with any one of claims 1- 6, wherein a spacing between the root point of the or each plant (17) and the or each light source (6) has an optimal spacing of 15 - 200 cm.

8. The light control method in accordance with any one of claims 1-7, wherein the ratio between the spacing of the light spots (7) and (8) to the spacing of the pots with rooting points of the or each plant (17) and to the distance between the plant root point (17) and the or each light source (6), the ratio and the optimal tolerance is group ratio 1: 6: 7 discrepancy 1.8.