Claims

1. A planter for growing plants with air pruning, the planter comprising:

an outer container for containing a planting material to grow the plants; and

an inner container disposed in the outer container to reduce a volume of the outer container for containing the planting material, the inner container comprising an inner space,

wherein the inner container is shorter in height than that of the outer container;

wherein a periphery of a bottom area of the outer container around the inner container comprises holes;

wherein the inner container comprises holes to facilitate growth of roots of the plants through the holes of the inner container into the inner space of the inner container, thereby exposing the roots of the plants to air in the inner space and air pruning the exposed roots.

2. The planter according to claim 1, wherein the inner container is integrally formed with or removable from the outer container.

3. The planter according to claim 1 or 2, wherein the inner container is integrally formed with or joined to the bottom area of the outer container, the inner container comprising a top area and a side area defining the inner space, the top area of the inner container opposite to the bottom area of the outer container;

optionally wherein the side area of the inner container is tapered outwardly from the top area or is perpendicular to the bottom area of the outer container; and

optionally wherein the top area and/or side area of the inner container comprises the holes to expose the roots of the plants to the inner space.

4. The planter according to any one of claims 1 to 3, wherein all surfaces of the inner container comprise the holes to expose the roots of the plants to the inner space.

5. The planter according to any one of claims 1 to 4, wherein the bottom area of the outer container comprises raised features to facilitate airflow into the inner space, wherein the inner container optionally comprises a closed bottom area facing the bottom area of the outer container, the closed bottom area of the inner container comprising holes optionally fluidically communicative with the holes in the bottom area of the outer container.

6. The planter according to claim 1 or 2, wherein the inner container is integrally formed with or joined to a side area of the outer container, the inner container comprising a top area and a side area defining the inner space, the top area of the inner container opposite to the side area of the outer container.

7. The planter according to any one of claims 1 to 6, wherein the inner container is integrally formed with the outer container and the outer container comprises an opening for accessing the inner space, wherein the opening is optionally closed by a cover.

8. A method for growing plants with air pruning, the method comprising:

providing a planter comprising an outer container and an inner container, the inner container being shorter in height than that of the outer container and disposed in the outer container to reduce a volume of the outer container for containing a planting material, a periphery of a bottom area of the outer container around the inner container comprising holes, the inner container comprising an inner space and holes;

filling the outer container with the planting material, the inner space absent of the planting material;

growing the plants in the planting material until roots of the plants reach the inner container;

facilitating growth of the roots of the plants through the holes of the inner container into the inner space of the inner container; and

exposing the roots of the plants to air in the inner space, thereby air pruning the exposed roots.

9. The method according to claim 8, wherein the inner container is integrally formed with or removable from the outer container.

10. The method according to claim 8 or 9, wherein the inner container is integrally formed with or joined to the bottom area of the outer container, the inner container comprising a top area and a side area defining the inner space, the top area of the inner container opposite to the bottom area of the outer container;

optionally wherein the side area of the inner container is tapered outwardly from the top area or is perpendicular to the bottom area of the outer container; and

optionally wherein the top area and/or side area of the inner container comprises the holes to expose the roots of the plants to the inner space.

11. The method according to any one of claims 8 to 10, wherein all surfaces of the inner container comprise the holes to expose the roots of the plants to the inner space.

12. The method according to any one of claims 8 to 11, comprising facilitating airflow into the inner space via raised features in the bottom area of the outer container, wherein the inner container optionally comprises a closed bottom area facing the bottom area of the outer container, the closed bottom area of the inner container comprising holes, optionally fluidically communicative with the holes in the bottom area of the outer container.

13. The method according to claim 8 or 9, wherein the inner container is integrally formed with or joined to a side area of the outer container, the inner container comprising a top area and a side area defining the inner space, the top area of the inner container opposite to the side area of the outer container.

14. The method according to any one of claims 8 to 13, wherein the inner container is integrally formed with the outer container and the outer container comprises an opening for accessing the inner space, wherein the opening is optionally closed by a cover.

15. A kit for making a planter for growing plants with air pruning, the kit comprising:

an outer container for containing a planting material to grow the plants; and

an inner container for assembling into the outer container, the inner container comprising an inner space,

wherein the inner container is shorter in height than that of the outer container;

wherein a periphery of a bottom area of the outer container around the inner container comprises holes;

wherein when the inner container is assembled into the outer container, the inner container reduces a volume of the outer container for containing the planting material; and

wherein the inner container comprises holes to facilitate growth of roots of the plants through the holes into the inner space of the inner container, thereby exposing the roots of the plants to air in the inner space and air pruning the exposed roots.

16. The kit according to claim 15, wherein the inner container is removably joinable to the bottom area of the outer container, the inner container comprising a top area and a side area defining the inner space, the top area of the inner container opposite to the bottom area of the outer container.

17. The kit according to claim 15, wherein when the inner container is assembled into the outer container, a top area of the inner container is opposite to the bottom area of the outer container and a side area of the inner container is perpendicular to the bottom area of the outer container.

18. The kit according to claim 16 or 17, wherein the top area and/or side area of the inner container comprises the holes to expose the roots of the plants to the inner space.

19. The kit according to any one of claims 15 to 18, wherein all surfaces of the inner container comprise the holes to expose the roots of the plants to the inner space.

20. The kit according to any one of claims 15 to 19, wherein the bottom area of the outer container comprises raised features to facilitate airflow into the inner space, wherein the inner container optionally comprises a closed bottom area comprising holes for optional fluid communication with the holes in the bottom area of the outer container.