CLAIMS

1. A method for hydroponic plant cultivation under high salinity environment, comprising a cultivation step of hydroponically growing a plant with a cultivation solution having a sodium chloride concentration of 1 % by mass or more, during which a salt tolerance imparting treatment is performed at least once by bringing a salt tolerance imparting agent into contact with at least a part of a root of the plant, thereby maintaining salt tolerance of the plant.

2. The method according to claim 1, wherein the salt tolerance imparting treatment is a treatment of soaking at least a part of the root of the plant into a treatment solution which contains the salt tolerance imparting agent, and has a sodium chloride concentration of 1 % by mass or more.

3. The method according to claim 2, wherein at least a part of the root of the plant is held in the treatment solution for 1 hour or more.

4. The method according to claim 2 or 3, wherein the treatment solution further comprises magnesium chloride in an amount of 0.5 % by mass or less.

5. The method according to any one of claims 1 to 4, wherein the salt tolerance imparting agent comprises at least one microorganism.

6. The method according to any one of claims 1 to 4, wherein the salt tolerance imparting agent comprises at least one microorganism that imparts the salt tolerance to the plant by adhering to the root, and

the concentration of the microorganism in the treatment solution is 10^3 CFU/mL or more.

7. The method according to any one of claims 1 to 6, which is performed using a hydroponic cultivation apparatus comprising:

a cultivation tank for storing the cultivation solution;

a cultivation pot for accommodating the plant; and

a float having one or more through-holes for fitting the cultivation pot, which is floated on the surface of the cultivation solution.

8. The method according to claim 7, wherein the salt tolerance imparting treatment comprises:

a water level adjustment step of adjusting an amount of water in the cultivation tank to be smaller than that in the cultivation step;

a mixing step of mixing the salt tolerance imparting agent into the cultivation solution in the cultivation tank after the water level adjustment step; and

a treatment step of cultivating the plant for at least one hour after the mixing step, while allowing the root of the plant to be in contact with the salt tolerance imparting agent.

9. The method according to claim 7, wherein the salt tolerance imparting treatment comprises:

a transfer step of allowing the float with the cultivation pot accommodating the plant to float on a surface of the cultivation solution, the cultivation pot being fitted into the through-hole of the float; and

a treatment step of cultivating the plant for at least one hour after the transfer step, while allowing the root of the plant to be in contact with the salt tolerance imparting agent.