A period until budding of a fruit vegetable plant (particularly, the first budding) particularly affects the cultivation efficiency of the fruit vegetable plant. The start of budding is used as an indicator of the transition from vegetative growth to reproductive growth, and by shortening the period until budding, fruiting and fruit growth can be promoted at an early stage, therefore cultivation efficiency is improved.

In the method of cultivating disclosed in JP1995-14303B (JP-H07-14303B) and JP4610695B, a period until budding is long, and the cultivation efficiency is not sufficient.

[0006] Embodiments of the present disclosure provide a method of cultivating a fruit vegetable plant in which a period until budding of a fruit vegetable plant can be shortened and efficient cultivation of the fruit vegetable plant is possible.

[0007] Specific embodiments are as follows.

According to an aspect of the present disclosure, there is provided a method of cultivating a fruit vegetable plant, including: raising seedlings of the fruit vegetable plant by a flooded hydroponic method using a culture solution having a dissolved oxygen concentration of 3.2 mg/l or more in an environment in which at least one condition selected from the group consisting of temperature, relative humidity, and light is controlled.

In an embodiment of the above aspect, the raising seedlings of the fruit vegetable plant is carried out by using a flooded hydroponic seedling raising apparatus including a support that supports the fruit vegetable plant, a panel having a hole for fixing the support, and a culture solution tank in which the culture solution is accommodated, and an area of a support surface of the support is 9 cm^2 to 40 cm^2.

In an embodiment of the above aspect, the panel has a plurality of the holes for fixing the support, and an interval between adjacent fruit vegetable plants supported by the support is 10 cm to 30 cm.

In an embodiment of the above aspect, the flooded hydroponic seedling raising apparatus includes a circulation mechanism that carries out supplying of the culture solution to the culture solution tank and discharging of the culture solution from the culture solution tank, and a flow rate of the culture solution is 2.0 l/min to 20 l/min in at least one of the supplying of the culture solution to the culture solution tank or the discharging of the culture solution from the culture solution tank.

In an embodiment of the above aspect, the flooded hydroponic seedling raising apparatus includes an oxygen supply mechanism that supplies oxygen to the culture solution.

In an embodiment of the above aspect, the fruit vegetable plant is a tomato or a melon.

An embodiment of the above aspect further includes planting the fruit vegetable plant after the raising seedlings, and cultivating the fruit vegetable plant after the planting using a cultivation apparatus including at least one selected from the group consisting of a light source for irradiating the fruit vegetable plant with artificial light from at least one of an upper surface direction or side surface direction of the fruit vegetable plant, a hydroponic cultivation mechanism, and a temperature/humidity control mechanism.

[0008] According to embodiments of the present disclosure, it is possible to provide a method of cultivating a fruit vegetable plant in which a period until budding of a fruit vegetable plant can be shortened and efficient cultivation of the fruit vegetable plant is possible.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Fig. 1 is a schematic cross-sectional view showing an embodiment of a flooded hydroponic seedling raising apparatus that can be used in a method of cultivating a fruit vegetable plant of the present disclosure.

Fig. 2 is a schematic top view of a panel included in the flooded hydroponic seedling raising apparatus of Fig. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0010] Hereinafter, embodiments for performing the present disclosure are described in detail. However, the present disclosure is not limited to the following embodiments. In the following embodiments, the components (including elements, steps, and the like) are not essential unless otherwise specified. The same applies to numerical values and ranges thereof, which do not limit the present disclosure.

[0011] In the present disclosure, a numerical range represented using “to” includes numerical values before and after “to” as a minimum value and a maximum value, respectively.

In a numerical range described in a stepwise manner in the present disclosure, an upper limit or a lower limit described in one numerical range may be replaced with an upper limit value or a lower limit value in another numerical range described in a stepwise manner. In addition, in a numerical range described in the present disclosure, an upper limit value or a