Claims

1. A hydroponic system provided with a hydroponic unit in which culture panels into which seedlings as a culture object are transplanted are vertically arranged, and

a light-collecting apparatus that takes natural light from the outside and irradiates the seedlings transplanted into the culture panel with the natural light, wherein

the light-collecting apparatus has a pair of reflecting plates that are vertically provided in parallel with a culture surface of the culture panel provided in the hydroponic unit,

the seedlings transplanted into the culture panel are irradiated with the natural light taken from a light-collecting opening through a light-emitting hole bored in the light-reflecting plate during a process in which it propagates while repeatedly being reflected by opposing reflecting surfaces of the reflecting plates,

each of the reflecting plates is allowed to be movable from an approaching position to a leaving position relative to the hydroponic unit,

the light-collecting apparatus has a bottom part reflecting plate that reflects light that propagates the inside and reaches the bottom towards the reflecting plate, and

the bottom part reflecting plate is formed in a mountain-like shape with a prescribed apex angle such that it can be bent at a top thereof, and the top of the bottom part reflecting plate rises up while bending when leaving at least one of the reflecting plates from the culture panel.

2. The hydroponic culture system according to claim 1, wherein, on a side part of a space between the light-collecting apparatus and the hydroponic unit, a side part-surrounding member that surrounds the space is provided.

3. The hydroponic system according to claim 1 or 2, wherein a surface of the reflecting plate facing the culture panel is allowed to be a reflecting surface.

4. The hydroponic system according to any one of claims 1 to 3, wherein the hydroponic unit comprises culture blocks in which a plurality of the culture panels are supported by a guide rail in a laterally-slidable manner.

5. The hydroponic system according to claim 4, wherein the hydroponic unit is configured as an assembly of the culture blocks that are formed in a vertically stepwise manner.