

Balancing solar power generation and agriculture

Meet yield standards for solar panel installation and contribute to prevention of natural disasters

Overview

In line with the introduction and promotion of renewable energy, the use of agricultural land for solar power generation projects is permitted, but there is a requirement that the simple yield of agricultural land below which solar panels are installed must be at least 80% of the average in the same region in the same year. In order to achieve this, it is necessary to secure the amount of light to plants by spacing the panels, but there is a problem that the amount of electricity generated by these panels decreases. On the other hand, the installation of the panels reduces the amount of light to plants, which adversely affects the yield. To solve these problems, the present invention provides a method for complementing the amount of light with an LED irradiator installed on the back side of the panels. The inventors completed and patented the present invention by obtaining detailed data on grass (Orchard grass, perennial ryegrass) growth and the amount of LED light. With the present invention, it is possible to secure the yield of agricultural products while contributing to the spread of solar power generation. On the other hand, in recent years, mountainous areas have been rapidly cleared and the installation of solar panels has been progressing, which is considered to be one of the causes of frequent natural disasters. By using the present invention, it is possible to install solar power generation facilities while maintaining farmland, which can contribute to the prevention of natural disasters.

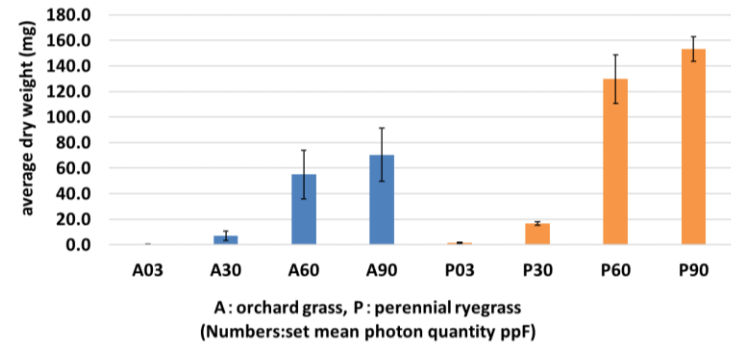
Product Application

- Farming solar power generation
- Solar Sharing

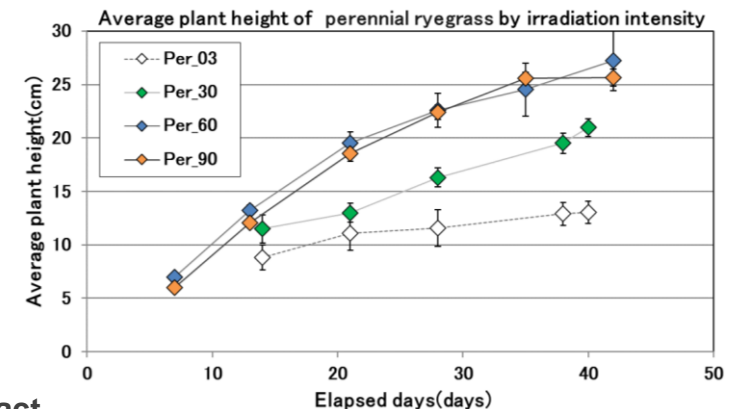
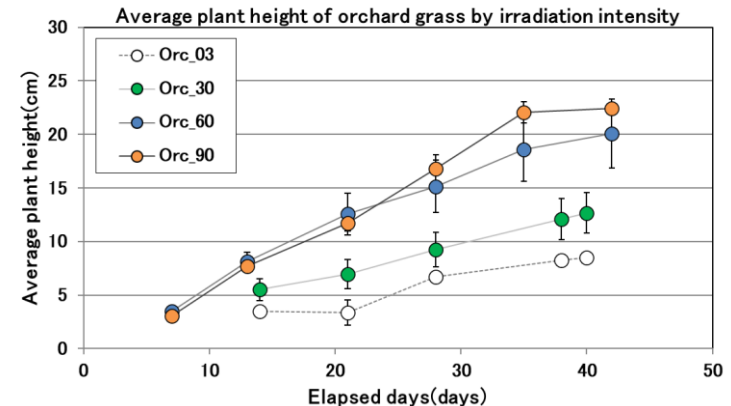
IP Data

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Average weight of aboveground stems and leaves by irradiation intensity



Features・Outstandings



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