Claims

1. An indoor farming lighting device (1) for at least one plant (2) comprising
   - an artificial light unit (3) for providing artificial light (3') for lighting the plant (2); and
   - a sunlight unit (4) for providing sunlight (4') for lighting the plant (2);
   - a mixing unit (5) for generating mixed light (5') from the artificial light (3') and the sunlight (4');
   - a distribution unit (6) for distributing the mixed light (5') and lighting the plant (2) with the distributed mixed light (5'); and
   - a setting unit (8) for setting a property of the mixed light (5') in accordance with a stored specification, wherein the stored specification comprises a time sequence of a spectral distribution that the mixed light (5’) should have.

2. An indoor farming lighting device (1) in accordance with claim 1,
   characterized in that
   the settable property comprises a spectral distribution and/or an intensity.

3. An indoor farming lighting device (1) in accordance with one of the preceding claims,
   characterized in that
   the setting unit (8) is configured to dynamically set the property of the mixed light (5').

4. An indoor farming lighting device (1) in accordance with one of the preceding claims,
   characterized in that
   the stored specification comprises a time sequence of an intensity that the mixed light (5’) should have.

5. An indoor farming lighting device (1) in accordance with one of the preceding claims,
   characterized in that
   the specification (11) depends on a measured variable, namely on a time and/or on a season.

6. An indoor farming lighting device (1) in accordance with one of the preceding claims, characterized in that the specification (11) depends on a measured variable, namely on a temperature and/or on a humidity.

7. An indoor farming lighting device (1) in accordance with one of the preceding claims, characterized in that the specification (11) depends on a measured variable, namely on a soil moisture and/or on a nutrient concentration.

8. An indoor farming lighting device (1) in accordance with one of the preceding claims,

characterized by

- a sensor unit (9) for detecting a spectral distribution;

with the setting unit (8) being configured to set the property of the mixed light (5') in dependence on the detected spectral distribution.

9. An indoor farming lighting device (1) in accordance with one of the preceding claims, characterized by

- a sensor unit (9) for detecting an intensity of the sunlight (4') and/or of the artificial light (3'),

with the setting unit (8) being configured to set the property of the mixed light (5') in dependence on the detected intensity.

10. An indoor farming lighting device (1) in accordance with one of the preceding claims, characterized by

- a sensor unit (9) for detecting an intensity of the mixed light (5'),

with the setting unit (8) being configured to set the property of the mixed light (5') in dependence on the detected intensity.

11. An indoor farming lighting device (1) in accordance with one of the preceding claims,

characterized by

- a filter unit settable by the setting unit (8) for the optical filtering of the sunlight (4') and/or of the artificial light (3').

12. An indoor farming lighting device (1) in accordance with one of the preceding claims, characterized by a filter unit settable by the setting unit (8) for the optical filtering of the mixed light (5').

13. An indoor farming lighting device (1) in accordance with one of the preceding claims,

characterized in that

the distribution unit (6) comprises a plurality of illuminating units (7) over which the mixed light is homogeneously distributed.

14. A plant cultivation system having an indoor farming lighting device (1) in accordance with one of the preceding claims and having one or more of the following devices:

- a temperature control device for setting a temperature for the plant (2) that can be illuminated by the lighting device (1);
- a humidifier for setting a humidity for the plant (2) that can be illuminated by the lighting device (1);
- a soil moisturizing device for setting a soil moisture for the plant (2) that can be illuminated by the lighting device (1);
- a fertilization device for setting a nutrient concentration for the plant (2) that can be illuminated by the lighting device (1).

15. A method of lighting at least one plant (2) comprising the method steps:

- providing artificial light (3') for the lighting of the plant (2);
- providing sunlight (4') for lighting the plant (2);
- generating mixed light (5') from the artificial light (3') and the sunlight (4');
- setting a property of the mixed light (5') in accordance with a stored specification, wherein the stored specification comprises a time sequence of a spectral distribution that the mixed light (5’) should have; and
- distributing the mixed light (5') and lighting the plant (2) with the distributed mixed light (5').