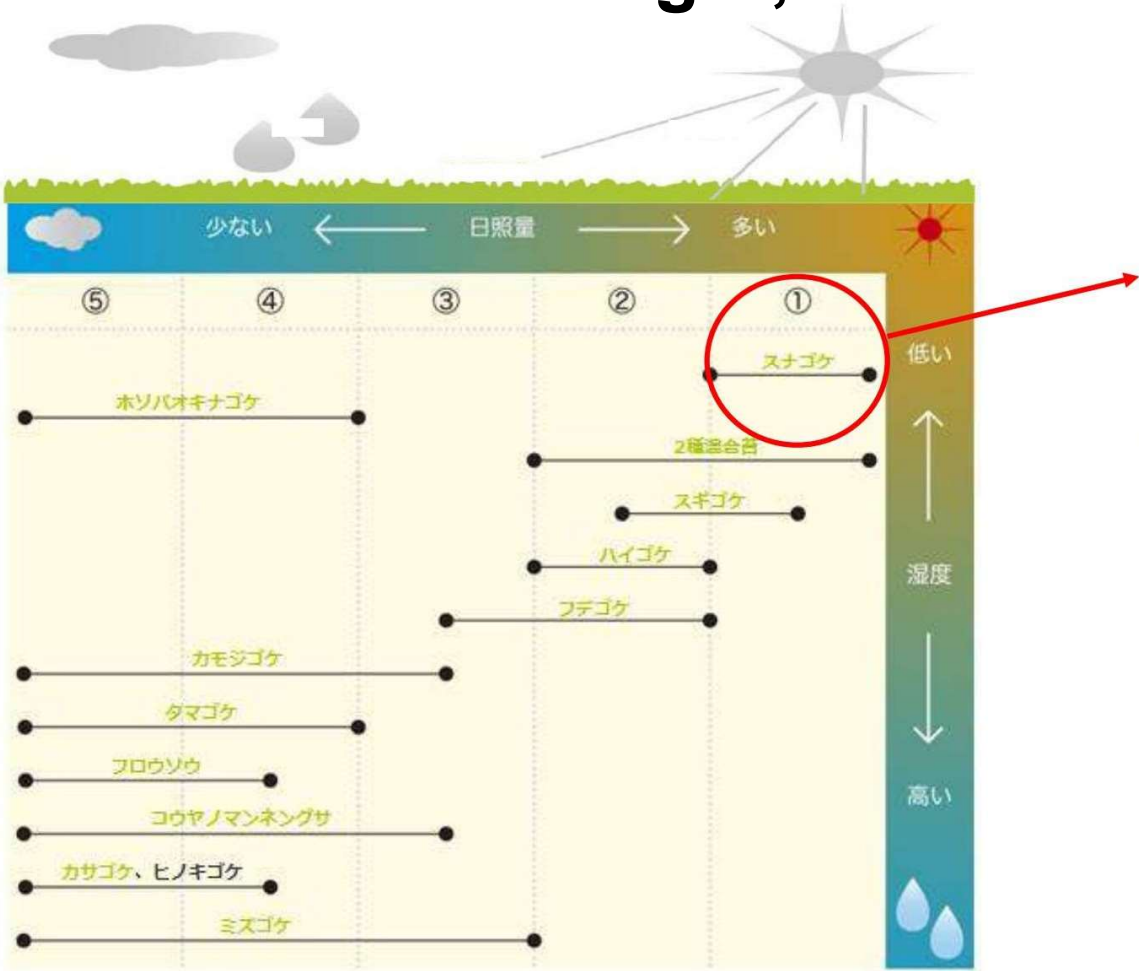




A technique for cultivating moss in sheets without using soil

Different types of moss grow depending on the brightness or darkness of sunlight, and the amount of humidity.



Sunagoke

Prefers bright sunlight and is drought tolerant

Based on the knowledge of a medical doctor and moss researcher,

す

Utilizing the functionality of moss as a material
Developing a technology to grow moss in sheets

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Patented



 Green's Green

**Mosses are epiphytic plants,
Instead of having roots, they have parts called adventitious roots.**

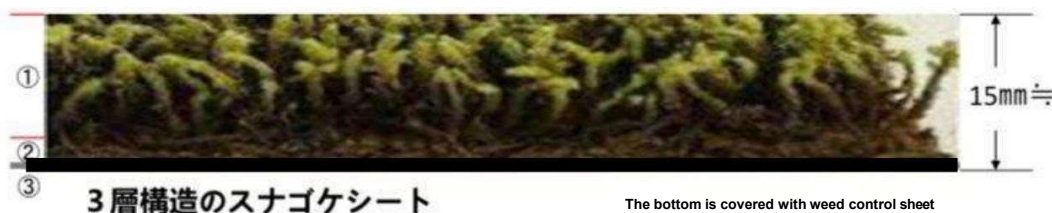


A technique that utilizes the characteristics of adventitious roots to grow moss on various materials

It is possible to grow crops in sheet form without using soil, which also makes it lighter.

This method allows the moss's rhizoids to penetrate the medium, preventing the moss from falling off and becoming detached.

スナゴケシートの防草効果や他社にない効果を謳える理由



苔の活着率を高める培地の開発

改良特許申請 特願2018-239983



The weed-control sheet is heat-pressed onto the backing of the vegetation sheet that serves as the medium.

UV rays are blocked from reaching the weed-control sheet lining, ensuring a service life of 30 years.

Moss sheet cultivation technology for large, long sizes (width 1m x length up to 50m)



It can be shipped rolled up, is lightweight and easy to process.

The biggest feature of Sunagoke Sheet is that it requires very little maintenance.



During the day, it dries out and stores water inside its body, and when it gets wet, its leaves instantly open up.

No watering required; can survive in summer with natural rain and humidity

No fertilizer required, just sunlight and rainwater

No soil required , clean, very light and exportable

No need to trim , leaves do not grow too long even when growing

Sunagoke moss is gaining attention as a greening material.

Moss absorbs heavy metals from the atmosphere and performs photosynthesis



Approximately 50% of the dry mass of moss is CO₂ fixation.

実験② PM2.5 のような微細な粒子を苔は吸収すると言われているが、PM2.5 よりはるかに微小なウイルスも吸着するか否かを実証する

苔アート自動灌水装置のウイルス吸着試験



調査方法

総量11.25 μ gのインフルエンザウイルスが苔20g(湿度60%)を通過した前後のウイルスの検出を調査。



測定結果

飛沫核が破壊後、苔の葉の表面の単層細胞膜を透過したウイルスが重金属や他の吸収物に吸着する

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湿度60%の苔10gを0.90 μ g入りウイルス液200ml(HA価128)に入れ、軽く攪拌後に苔を取り出し、残液のウイルス量(HA価)を測定。



ホルマリン溶液をしみこませた脱脂綿に苔を入れたチャンバーに投入し、直後と1時間後のホルマリン濃度変化を測定する。

20×20×20cmのチャンパーに苦アートの1/50の苦アート
(0.02m)を混入、ホルマリン濃度の減少を新たに定めた。

57mg/mL×50=2850mg/mL/苦アート×m²
となり、応接室42.3m²に換算すると
約12g/mL/苦アート×m²/h
となり、応接室42.3m²の空間でホルマリンの臭いが、
1時間経には約12g臭美れると推定される。

分子重量の比較で推測すると
12gxCl2.1/HCHO30.1=4.8g
となり、応接室42.3m²の空間で4.8gの臭が
1時間経には約4.8g臭美れると推定される。



ホルマリン濃度変化

Figure 1 is a line graph showing the concentration of HO-10 (mg/ml) versus time (min) for the degradation of HO-10. The concentration starts at 10.7 mg/ml at 0 min and decreases to 5.0 mg/ml at 60 min. A callout box indicates a decrease of 5.7 mg/ml.

Time (min)	HO-10 Concentration (mg/ml)
0	10.7
10	9.5
20	8.5
30	7.5
40	6.5
50	5.5
60	5.0

Moss has also been shown to have deodorizing properties.

The worsening weed problem in companies: the impact of global warming



Weed control costs are huge

Reduce costs by integrating planting maintenance
and weed control



Urban Green Spaces Act, Factory Location Act, Moss Garden



Indoor greening and creativity

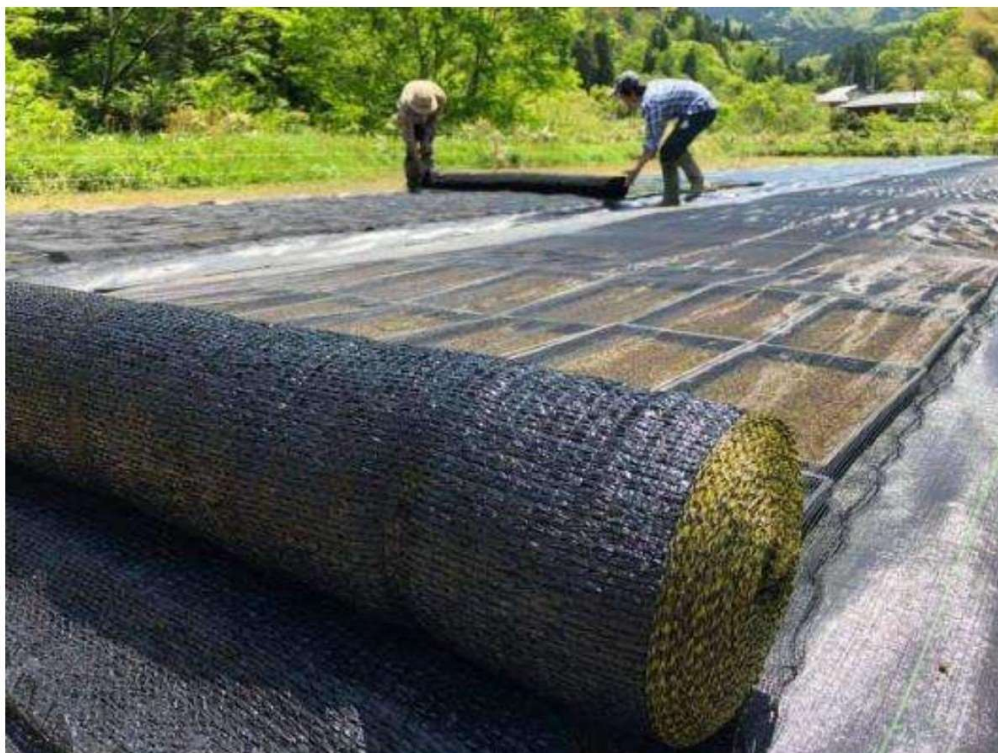


Resolving issues faced by local communities and businesses





Utilizing abandoned farmland, unused land, and land beneath solar power plant panels



Monetizing unused land by cultivating moss



Moss cultivation and management leads to agricultural-welfare collaboration and employment of young people in agriculture.



Moss cultivation is a job that even people with disabilities can do.

Thank you for your attention.

