Green Roofs & Mycelium Inoculation

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Types of Green Roof

• Extensive green roofs
• Intensive green roofs
• Bio-Diverse/Living roofs
• Blue Roofs
Fulham Green Roof

Bespoke Green Roof designed by The Green Infrastructure Consultancy Ltd

- Hay Filter layer
- Carbon substrate
- Wildflowers plants and seeds
- Mycelium Inoculant
Why

• An undeniable need to Drawdown on atmospheric greenhouse gases.
• Presented with an opportunity via Cummins Turbo Diesel engines as part of a global environmental gateway.
• Champion the many advantages of green roofing.
• Utilise new and existing green roofs/walls to harbour mycelium.
• Carry out what we understand to be world first analysis on mycelium inoculated green roofs.
• Provide an immediate solution to enhance the effectiveness of green roofs
Testing

Testing is being carried out by Jens Arne-Subke from the University of Stirling.

The substrate was taken from the Shell, Fulham project replicating the planting density.

Our objective is to determine the greenhouse gas balance of green-roof soil/plant systems using ‘mycelium’ inoculum.

We found a 24% increase of Microbial Biomass from the control samples to those that were inoculated.

Measurements were taken on days 1, 30 & 90 for the following;

A conservative yearly prediction would be 247g/m2*
What Next

• Continue to carry out further testing on different types of green roof.
• Short term – working with leading professionals create 1st Carbon negative green roof system
• Medium term - retrofit on real estate properties in cities in UK
• Medium term - link with partners in other European cities
• Long-term – produce in said cities to reduce carbon miles and create local jobs.
• Long-term – continue to improve the Carbon negative aspects of the system