



Substrate modifications and cultivation experiments

Substrate modifications

Loose products are increasingly converted into bound material with more reliable and homogeneous properties. WUR Greenhouse Horticulture assists companies with confidential testing for:

- Product improvement. In a series of production runs feedback on the properties is used to improve the product.
- Micro scale production tests. Producers ask for small production runs with lab scale production technology such as binder – substrate combinations, ovens or composting.
- Problem solving. Problems in the production chain are analyzed and solved and proof of the principle documentation may be supplied to convince the market of cause and effect.

Cultivation experiments

Many substrates have been tested in cultivation by WUR Greenhouse Horticulture. Examples are:

- Coir blocks and slabs;
- Binders for peat;
- Rice husk, oil palm fibres;
- Glass foam;
- Rockwool slabs, blocks and plugs;
- Composted materials.

Greenhouses with multiple independent dosing systems for water and nutrients are available.



Figure 1. Glass foam for cucumbers.



Figure 2. Rockwool in coir blocks.

Testing and Benchmarking

We offer step wise programs for product improvement and benchmarking. Testing and benchmarking will give producers a clear idea of their product properties and how this ranks them next to competitors.

Cooperation

Cooperation may mean the identification of possible market partners and starting technical market communication. Cooperation is also a key issue when financing larger projects. Wageningen UR Greenhouse Horticulture has experience with the initiation and control of larger national and international projects.



Figure 3. Burnt rice husks in Indonesia.