

Valorization of spent mushroom compost (champost)

Rien van der Maas (WageningenUR-PPO)
Jeroen van Bon (WageningenUR-FBR)



WAGENINGEN UR
For quality of life

Problems/opportunities



Problems

- Removal champost costs 19 M€/jaar (2014)
- Removal in Nederlands restricted by P+N law
- Export to Germany increasingly restricted

Opportunities

- Champost good soil improver
- Market for soil improvers low in P+N
- New Phosphorus resources needed for P-fertilizers

WAGENINGEN UR
For quality of life

P-extraction; preliminary results

- Orientation in lab: 50% P extracted
- Small scale installation (20 liter batches):
 - 90% phosphorus-extraction possible
 - 50% nitrogen-extraction possible
- Large scale installation Agrivalid (1 m³ batches)
 - First experiment: 50-75% phosphorus-extraction

Aim: 75% phosphorus-extraction (33% nitrogen-extraction)



WAGENINGEN UR
For quality of life



Planning

- May – October 2015:
Optimizatlon P-extraction proces large scale installation
- AGRI VALID logo
- 2015/2016: demonstration soil improvement characteristics low-P-champost
 - 6 crop/soil combinations
- 2016/2017: valorization in operation

WAGENINGEN UR
For quality of life

Thank you for your attention

rien.vandermaas@wur.nl
+31 488 473728

Project initiated by:



Research-team

- WUR-PPO (Rien van der Maas)
- WUR-FBR (Jeroen van Bon)
- Agrivalid (Sven Mommers)

WAGENINGEN UR
For quality of life

Financed by:

- Topsector T&U/min. EZ
- Productschap Tuinbouw
- Provincie Gelderland
- Agrivalid
- Mushroom growers