



Research Organisations ↗

Funding ↗

Publications ↗

Links ↗

Pulse Crop Genetic Improvement Network ↗

Objectives:

1: Communication and Delivery

2: Phenotyping

3: Performance

4: Reverse genetics

5: Genetic mapping in crop legumes

6: Genetics of Seed Quality Traits



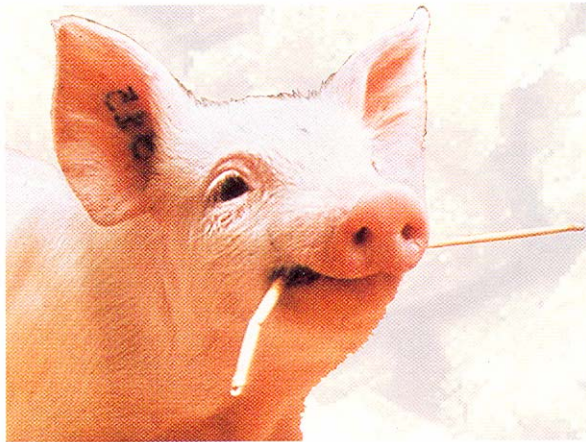


Objectives:

6: Genetics of Seed Quality Traits

Definition of seed quality

- = end-use for feed, food & non-food
- [\neq germination/vigour/disease]





Research Organisations ↗

Funding ↗

Publications ↗

Links ↗

Pulse Crop Genetic Improvement Network ↗

Objectives:

6: Genetics of Seed Quality Traits

- a) Expansion of Objective 1: end-users
- b) Consultation & definition
- c) Tools and protocols for key traits
- d) Crosses and populations
- e) Satellite projects





Research Organisations ↗

Funding ↗

Publications ↗

Links ↗

Pulse Crop Genetic Improvement Network ↗

Objectives:

6: Genetics of Seed Quality Traits

a) Expansion of Objective 1: end-users

Extant databases:

- PGRO & BEPA
- AEP (UK) & EU TTP
- Stakeholder & end-users
- Personal contacts





Research Organisations ↗

Funding ↗

Publications ↗

Links ↗

Pulse Crop Genetic Improvement Network ↗

Objectives:

6: Genetics of Seed Quality Traits

b) Consultation & definition

Traits:

- Allergenic proteins
- Protein content
- Starch content (biofuels)
- Protein composition (plant 'milk' & 'meat')
- Marrowfat-ness (good/bad)
- Novelty foods

PCGIN working sub-group to prioritise traits





Research Organisations ↗

Funding ↗

Publications ↗

Links ↗

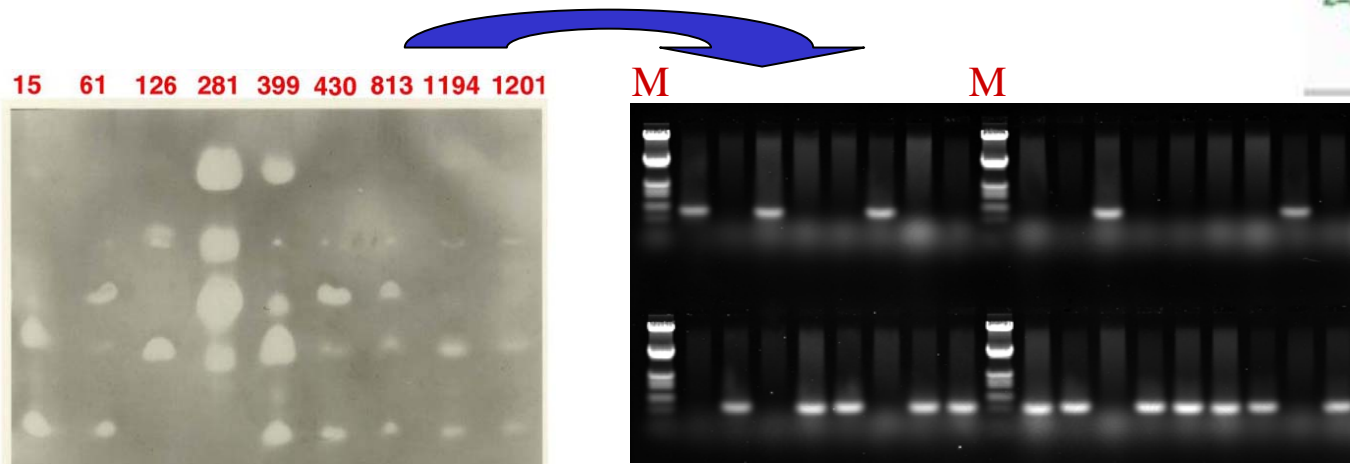
Pulse Crop Genetic Improvement Network ↗

Objectives:

6: Genetics of Seed Quality Traits

c) Tools and protocols for key traits

- Marker-assisted selection for quality



Nutritional assessment
(Nottingham)





Research Organisations ↗

Funding ↗

Publications ↗

Links ↗

Pulse Crop Genetic Improvement Network ↗

Objectives:

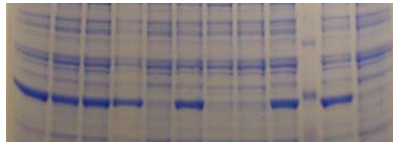
6: Genetics of Seed Quality Traits

c) Tools and protocols for key traits

- Marker-assisted selection for quality



Minor proteins in pea seeds

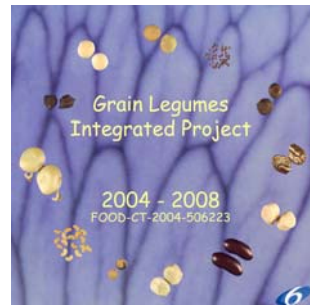
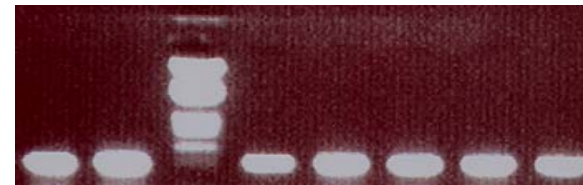


+/-



Allergenic protein: EU GLIP

+/+





Research Organisations ↗

Funding ↗

Publications ↗

Links ↗

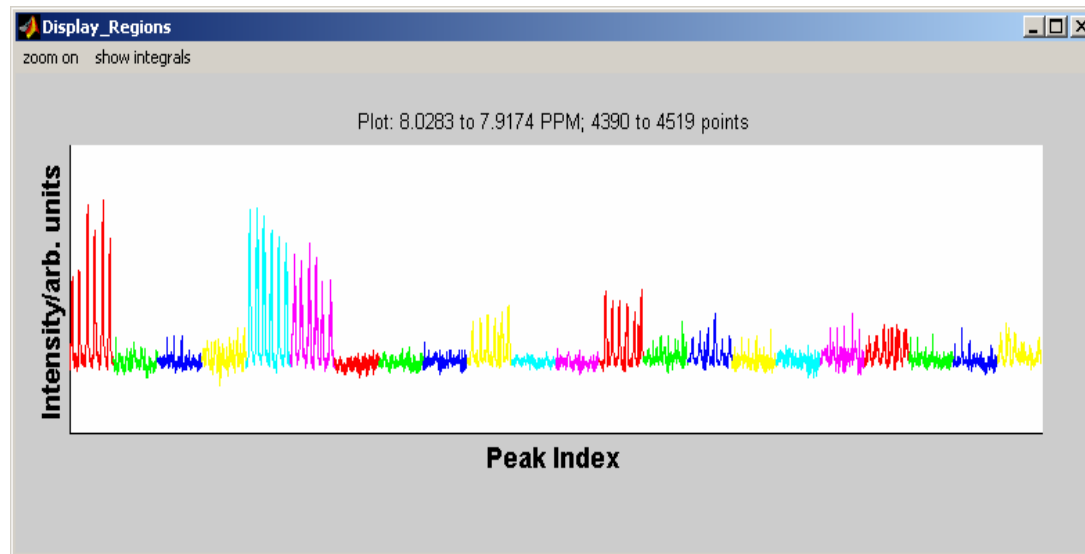
Pulse Crop Genetic Improvement Network ↗

Objectives:

6: Genetics of Seed Quality Traits

c) Tools and protocols for key traits

Metabolite profiles and plant stress/product quality





Research Organisations ↗

Funding ↗

Publications ↗

Links ↗

Pulse Crop Genetic Improvement Network ↗

Objectives:

6: Genetics of Seed Quality Traits

d) Crosses and populations

- Dependent on identification of variants

e) Satellite projects

- Industrial exploitation

Proposal for sub-group to prioritise traits:
 Ideas & suggestions

