

# Inoculation Practices Survey 2013

Under DAQ00180 Extension of Nitrogen Fixation Program Outputs – northern region

## General

1) Please provide the location (Postcode) of your farm

2) Indicate total farm size (Ha)

3) Indicate legume types and amount (% of farm) sown in 2012/13

|                 | <5%                      | 5-10%                    | 11-20%                   | 21-50%                   | >50%                     |
|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Field pea       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Lentil          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Faba/broad bean | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Chickpea        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Lupin           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Soybean         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mung bean       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Peanut          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other pulses    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Lucerne         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sub-clover      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Serradella      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other pasture   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## Current understanding

4) Legume inoculants contain rhizobia. What do the rhizobia do?

- Help roots to grow faster
- Improve phosphorus availability
- Form nodules and fix nitrogen for use by the plant
- Cause root disease

5) There are different inoculant groups (e.g. E, F, G, N etc.). Did you know rhizobia are legume specific?

- Yes
- No

6) The amount of Nitrogen fixed by legumes is affected by

- Soil nitrate N
- Legume nodulation
- Legume variety
- Legume dry matter production
- Agronomic practices
- All of the above

7) Peat legume inoculants:

True or False

- |  |                          |                          |
|--|--------------------------|--------------------------|
| Contain living bacteria                                      | <input type="checkbox"/> | <input type="checkbox"/> |
| Can be mixed with pesticides                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| Can be mixed with fertilisers                                | <input type="checkbox"/> | <input type="checkbox"/> |
| Are sensitive to extremes of temperature                     | <input type="checkbox"/> | <input type="checkbox"/> |
| Should not be stored > 2 weeks after opening                 | <input type="checkbox"/> | <input type="checkbox"/> |
| Slurry inoculated grain legumes should be sown within 24 hrs | <input type="checkbox"/> | <input type="checkbox"/> |

#### Practices

8) Do you use legume inoculant?

- Yes
- No

9) If you answered yes to the above question, what legume/s do you use it on?

- Field pea
- Lentil
- Faba or broad bean
- Chickpea
- Lupin
- Soybean
- Mungbean
- Peanut
- Other grain legumes
- Lucerne
- Sub clover
- Other pasture legumes

10) Are there legumes you grow but no longer inoculate?

- Field pea
- Lentil
- Faba or broad bean
- Chickpea
- Lupin

- Soybean
- Mungbean
- Peanut
- Other grain legumes
- Lucerne
- Sub clover
- Other pasture legumes

11) What inoculant formulation do you use and how do you apply it?

|                             | Peat                     | Freeze dried             | Liquid                   | Granule                  |
|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Applied as slurry to seed   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Water injection             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Mixed with seed in seed box | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sown from fertiliser box    |                          |                          |                          | <input type="checkbox"/> |
| Other (please specify)      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I use pre-inoculated seed   |                          | <input type="checkbox"/> |                          |                          |

12) Why do you use legume inoculant?  
(tick more than one box if appropriate)

- Yield benefit
- Soil nitrogen benefit
- Normal practice
- Agronomist recommendation

13) Do you consider the Green Tick logo to help with inoculant choice

- Yes
- No
- I am not aware of the Green Tick logo

14) If you do not use legume inoculant, why not?

- Too costly
- Inconvenient
- The benefit is not clear
- Other reasons.....

15) What stops you growing more legumes?

- Poor economic returns
- Reliability of production
- Difficulties with marketing
- Difficult to control weeds

16) Do legumes help reduce your N fertiliser costs?

Yes

No

Helpful to know

17) Indicate areas where further information would be useful (1=not useful, 5=very useful)

Compatibility with chemicals (herbicides/insecticides/fertiliser)

1 2 3 4 5

When and where and how to inoculate

1 2 3 4 5

Independent information on products and formulations

1 2 3 4 5

How to assess nodulation

1 2 3 4 5

Economic benefits of inoculation and legume N fixation

1 2 3 4 5

Ranking of grain legume varieties for N fixation efficiency

1 2 3 4 5

Trouble shooting legume inoculation failure

1 2 3 4 5

Other issues would be useful to know (please specify)

Please provide your details if you would like to receive a free inoculation handbook.

Name

Postal address

Phone (optional)

Email address (optional)

**Please return this survey via either fax or email to :**

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