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# **PEA Descriptor Form**

1. (Form created by *Seeds of Diversity Canada* for *The Bauta Family Initiative on Canadian Seed Security.)*

Please observe several pea plants in the same bed/row. Use a separate form for each variety.

*If you cannot answer any of these questions, just leave them blank*

For questions asking for averages, please take 10 measurements from different plants. See chart on last page.

**Variety name** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **[ ] Variety name is unknown**

**Observer** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Location** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Population size** How many seeds did you plant in total? \_\_\_\_\_\_\_\_\_

**Germination rate** What percentage of seeds germinated? \_\_\_\_\_\_\_\_\_

**Final Population** How many plants did you harvest seeds from at the end of the season? \_\_\_\_\_\_\_\_\_

**Dates**

Date when you sowed the seeds? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date when 50% of the seeds germinated? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date when the first flowers opened? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date when the first pod was ready to harvest (for eating) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date when the first dry seeds were ready to harvest? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Rogueing for Seed Production**

Rogueing should be done periodically throughout the season especially:

* At the seedling stage for lack of vigour
* As plants grow for off-type foliage
* At flowering for off-type flowers
* At fruiting for off-type pods
* At harvest for ability to mature fruit/dry down

For peas, characteristics to look for when rogueing include:

* Seedling vigour (select for high germ rate in cold, wet soil)
* Vining or bush habit (very noticeable throughout growth phase)
* Flower colour and variation (pink/purple or white, number per node)
* Pod colour and variation (near maturity & at dry down, pod thickness, crispness, colour)
* Dry seed stage (wrinkled or smooth, colour)

***\*The best time to rogue for off- types is before flowers start to appear. After flowers appear rogueing should focus more on fruits and seeds***

**Early/Mid-Season**

Roughly how many plants were removed after rogueing for seedling vigour? (Typically remove about 10% of weakest seedlings and any seedlings showing signs of disease after germination)

 \_\_\_\_\_\_\_\_\_\_\_\_ (# plants removed) or \_\_\_\_\_\_\_\_\_\_ % of plants

What colour are the seed leaves (cotyledons)?

 green yellow mixed other



**Flower**

Are the flowers white or do they have some colour? white colour mixed (details \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

What is the average number of flowers in a cluster? \_\_\_\_\_\_\_\_

**Late Season**

What is the position of the broadest part of the leaf?

 at middle or slightly moderately towards base strongly towards base

 towards base

   

How strong is the leaf dentation (the degree of toothlike ridges surrounding the leaf) on leaves from the main stem?



What is the average length of a leaf at maturity? \_\_\_\_\_\_\_\_ cm

What is the average width of a leaf at maturity? \_\_\_\_\_\_\_\_ cm

What is the average height of a plant, from the ground to tip, when

pods have reached edible maturity? \_\_\_\_\_\_\_\_ cm

What is the average distance between leaf nodes at maturity \_\_\_\_\_\_\_\_ cm

**Pod**

What type of pods does this pea have? edible (flat or round) non-edible mixed

What colour are the pods? green mixed other

What shape are the pods? (observe when they are still flat) curved straight mixed other

How much curvature does the pod exhibit when they are fully developed?



Are the tips of the pods pointed? (observe when still flat) pointed blunt mixed other

What is the average length of a pod at edible maturity? \_\_\_\_\_\_\_\_ cm

What is the average width of a pod at edible maturity? \_\_\_\_\_\_\_\_ cm

**Seed**

Does the seed's hilum (the scar where the

seed was attached to the pod) have a dark colour? yes no mixed

Most pea seeds are uniform green/white in colour, but some have other colours or markings. What colour are these seeds?

 just uniform green/white coloured or with markings mixed

If coloured or with markings: what colour? green black brown blue grey purple mixed

 what pattern? solid mottled spots mixed

Are the seeds smooth or wrinkled? smooth wrinkled mixed other

What is the average number of seeds per pod? \_\_\_\_\_\_\_\_

Are the stems round or flattened? (plants with flattened (or "fasciated") stems tend to produce clusters of flowers only at the tops of the plants)

 round flattened mixed

What is the total weight of seeds harvested from this variety? \_\_\_\_\_\_\_\_

**Disease**

Are there any signs of disease on the plants or fruit? (if so please take a picture and include a brief description)

 Yes (picture) No

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Based on your knowledge and growing experience please rate this variety on the following characteristics on a scale from 1-5 (1 being very poor, 5 being excellent)**

**Productivity (how much/often did plants produce fruits): 1 2 3 4 5**

**Uniformity of fruit ripening (across entire plot): 1 2 3 4 5**

**Flavour: 1 2 3 4 5**

**Disease resistance: 1 2 3 4 5**

**Uniformity of fruit size: 1 2 3 4 5**

**Uniformity of fruit shape: 1 2 3 4 5**

**Suitability for your location/climate: 1 2 3 4 5**

**General customer appeal (i.e colouring/size) 1 2 3 4 5**

**Efficiency of picking 1 2 3 4 5**

**Ease of transport (i.e. bruising etc.) 1 2 3 4 5**

**Would you want to grow this variety again?** Yes No

**Please list any pros/cons related to growing this variety.**

Pros Cons

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Flowers in a cluster** | **Leaf Length** | **Leaf Width**  | **Plant Height** | **Distance between nodes** | **Pod Length** | **Pod Width** | **Seeds per Pod** |
| **1** |  |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  |  |  |  |
| **3** |  |  |  |  |  |  |  |  |
| **4** |  |  |  |  |  |  |  |  |
| **5** |  |  |  |  |  |  |  |  |
| **6** |  |  |  |  |  |  |  |  |
| **7** |  |  |  |  |  |  |  |  |
| **8** |  |  |  |  |  |  |  |  |
| **9** |  |  |  |  |  |  |  |  |
| **10** |  |  |  |  |  |  |  |  |

**Please write any notes or special observations that you would like to mention. Thank you for your help!**