



PGRO Variety Trials Results 2024

Vining Peas

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WEATHER FOR THE 2024 SEASON.

Comments below are a summary taken from the meteorology website for the UK <https://www.metoffice.gov.uk/research/climate/maps-and-data/summaries/index>.

Winter

The weather was milder than average throughout the winter but very variable with several named storms. Rainfall levels were above average with 445.6mm of rainfall. This was also following a rainier Autumn, raising risks of waterlogging. Temperature was slightly up, and sunshine slightly down.

Spring 2024

The spring was warm, unsettled, very wet and dull, with a succession of low pressure systems bringing rain and wind. March had very heavy rain in southern and central England, some regions of the country had double usual rainfall in all three months, overall on average rainfall was 132% of the 1991-2020 average.

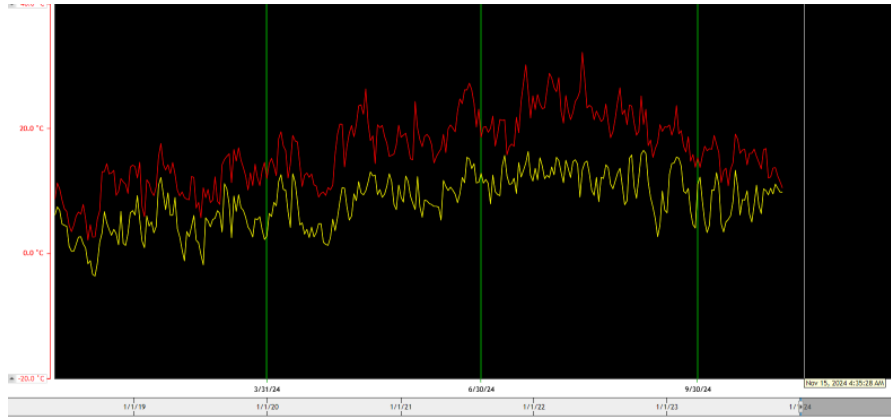
Summer 2024

The summer was cooler than average, and much cooler than 2023. June and July both had scattered showers throughout the month. July was cooler at the start of the month, then increased up to 30 degrees Celsius at the end of the month. August was warmer still and had several thunderstorms. Overall it was the coolest summer than 2015, with scattered and variable rainfall. Sunshine levels were around average.

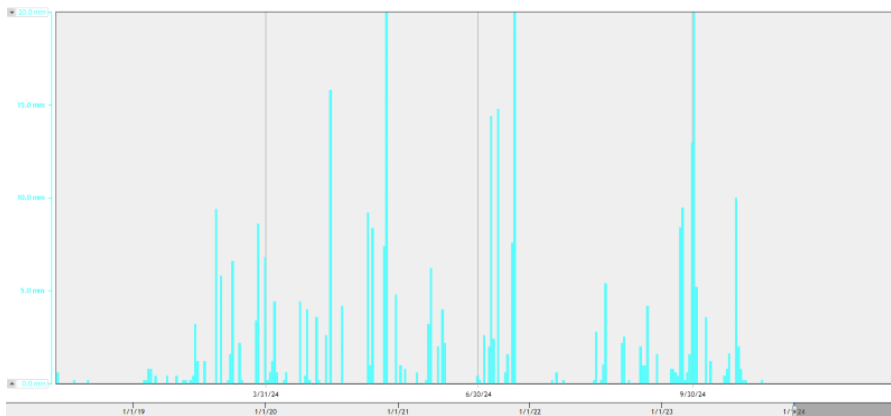
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METEROLOGICAL DATA - 2024 season



2024 Temperature from site weather station



2024 rainfall from site weather station

Nocton monthly rainfall totals (mm) 2024

| Month | 2022/2023 Monthly Rainfall (mm) Nocton |
|-----------|---|
| March | 43.6 |
| April | 45.8 |
| May | 61.0 |
| June | 18.4 |
| July | 68.5 |
| August | 10.6 |
| September | 35.2 |

VINING PEAS

SUMMARY

In **2022** the spring was warmer than average, particularly in March. Rainfall was low for March and April, though not as dry as the previous two seasons. May had a typical amount of rain. June, July and August were all warmer than average temperatures. There were also heatwaves where the temperature reached around 40 C. June and July also had low rainfall alongside typical sunshine.

In **2023**, the most important weather events were the very wet march that affected drilling dates and hot period in early July which co-coincided with flowering of lots of varieties and led to flowering ending sooner.

In **2024**, there was frequent rain throughout the year, meaning that drought stress was less important than recent years. As in 2023 this delayed drilling dates. June and July were cooler than recent years, alongside the rainfall this led to less stress on the plants during flowering. Some varieties were able to translate this into more nodes.

Standard Size Varieties, Varieties completing 3 years of trials, Nocton 2024. Tables 01 & 02 & 03

Eleven varieties completed 3 years of evaluation in 2024. These varieties were evaluated in the Standard Main Trial 2024 and had previously been evaluated in a Main and Preliminary Trial. The data is given in three tables as Obigo had its preliminary trial in 2020 and Valbona started in 2021 but missed 2023, so they are compared to the controls in different three year sets.

Yields from the yield standard Oasis were similar in 2022 & 2023 (6.18 t/ha & 6.37 t/ha) and highest in 2024 (9.18 t/ha) at TR100. Maturity of Oasis when compared to Avola was +11 days in 2022 but was +9 days in 2023 due to the heatwave and +14 days in 2024 due to cooler temperatures.

Amaya (Brotherton) matured 3 days later than Avola. Yields were higher than Avola (56% of Oasis for TR 100 and 62% for TR 120). Yields were highest in 2024. Produce was smaller in size than Oasis, medium size grade.

Bering (Brotherton) matured 8 days later than Avola. Yields were less than Oasis (68% for TR 100 and 67% for TR 120). Yields were lowest in 2023. Bering has one of the best standing abilities (6) and the darkest pea colour (4.9).

Logic (Brotherton) matured 9 days later than Avola. Yields were less than Oasis (52% of Oasis for TR 100 and 56% for TR 120). Yields were highest in 2024.

PFR 1909 (PFR) matured 9 days later than Avola . Yields were 90% of Oasis at TR100 (89% for TR 120). Yields were highest in 2024. PFR 1909 has moderate field resistance to Downy Mildew.

CS-498AF (Crites Seed) matured one day before Oasis. Yields were lower than Oasis (66% of Oasis for TR 100 and 68% for TR 120). Yields were very consistent between years. Produce was smaller in size than Oasis, medium-small size grade. CS-898AFis resistant to powdery mildew.

Kotzebue (Brotherton) matured on the same day as Oasis. Yields were 75% of Oasis at TR 100 and 85% at TR 120. Yields were highest in 2024. Kotzebue is resistant to powdery mildew.

Lakeshore (Brotherton) has the same maturity score as Oasis. Yields were 76% of Oasis for TR 100 and 80% for TR 120). Yields were highest in 2024. Produce has a large size grade and is resistant to powdery mildew.

PFR-1705 (PFR) matured on the same day as Oasis. Yields were lower than Oasis (79% for TR 100 and 82% for TR 120). Yields were lower in 2022. Produce was similar in size grade ratios to Oasis.

Namrata (Brotherton) matured 1 day later than Oasis. Yields were higher similar to Avola (57% of Oasis for TR 100 and 58% for TR 120). This average needs to be understood in the context of yields being very low in 2022 and 2023 and more than double in 2024. Produce was smaller in size than Oasis, medium size grade.

Obigo (Syngenta) matured 1 day later than Oasis. Yields were higher 90% of Oasis at TR 100 and 19% at TR 120. Yields were similar in all three years. Produce was smaller in size than Oasis, medium size grade. Obigo has resistance to both downy mildew and powdery mildew.

Valbona (Crites Seed) matured 8 days later than Avola. It is a determinate variety, producing pods that mature at a similar time point. Yields were lower than Oasis (61% for TR 100 and 63% for TR 120). Yields were highest in 2021. Valbona has moderate field resistance to downy mildew. Standing ability (6) was better than Oasis (2). Data provided by the breeder lists Valbona as having resistance to powdery mildew.

Petits Pois Varieties, Varieties completing 3 years of trials, Holbeach 2024 (Table 4)

Four varieties completed 3 years of trials in 2024. Three of them were trialed in consecutive years, Flovert was trialed in 2021, skipped 2022, then was testing in 2023 and 2024. Waverex has issues in 2024, but its yield was modelled for the season based on other established varieties in trial.

Atasiska (Brotherton) matured two days before Waverex, has good field resistance to downy mildew. Its yield at TR 100 was 74 % of Waverex, and at TR 120 it was 82%. Atasiska is a semi-leafless variety. It has a score of 8 on a 1-9 scale for standing.

Atom (Brotherton) matured one day before Waverex. Yields were higher than Waverex (118% at TR100 and 126% at TR120). It has a larger size grade than Waverex, and arguably could be placed into a small garden category, between Standard Peas and Petit Pois. Atom is resistant to powdery mildew and is semi-leafless.

Digit (Brotherton) matured on the same day as the control variety Waverex. Yields were lower than Waverex at TR100 (80%) and similar at TR 120 (97%). It is also a semi-leafless variety. It has a score of 8 on a 1-9 scale for standing.

Flovert (Syngenta) matured two days after Waverex. Its yield was 104% of Waverex at TR 100 and 100% at TR120. It was moderate resistance to Downy Mildew. Flovert has a very small size grade.

TRIALS IN 2024

Overall Summary

Standard size varieties were evaluated in Main, Preliminary and Screening Trials at Nocton, Lincs. Trials of petits pois varieties were evaluated at Holbeach, South Lincolnshire.

Promising varieties from 2022 and 2023 Preliminary Trials were assessed in the Main Trial. Preliminary Trial varieties were at National List stage of testing.

The 2024 trials used seed treated with Prepper. This seed treatment is weaker than those in the historical datasets, but gives some benefits over sowing untreated seed, which had to be done in 2021-2023. This means there was less protection than in the historical dataset for damping off, downy mildew and *Ascochyta* diseases. Avola was the standard variety for maturity (Sherwood was also included as a potential replacement for Avola); Oasis was the yield standard and Ambassador was the late maturing standard. Waverex was the petits pois yield and maturity standard.

Nocton trials were drilled on 27th March and Holbeach trials on 26th April. At Nocton, the peas emerged with few losses, though some varieties became patchier over time due to disease. At Holbeach drilling conditions were good with the peas being drilled at a depth where there was still a layer of retained moisture. The peas at Holbeach emerged well and most varieties had no notable establishment issues. Waverex had seed quality and establishment issues, but was able to be modelled off other standards in neighbouring private trials. Broad-leaved weeds were controlled with pre and post-emergence herbicides. Insecticides were applied to control pea aphid (*Acyrtosiphon pisum*) and pea moth (*Cydia nigricana*). At Holbeach inputs were the same as the surrounding commercial crop.

The vining pea harvest started on the 14th June and was completed on the 29th of July. Pea colour for most varieties was very good.

A sample from all trials were frozen for later colour and Brix assessments. Most varieties became a little darker in colour after freezing and defrosting than in the raw state.

Standard Pea Main Trial, Nocton - Tables 06 & 07

Growth at this site was generally good though there were some individual varieties that were damaged by pythium or downy mildew. The cooler weather led to varieties having a wider maturity spread than most years. Yields were also up in general with most varieties trying to set more nodes per plant.

Yields from the standard Oasis (9.18 t/ha) was higher than 2023 and 2022 at TR 100. However, both seasons had very hot periods around harvest. 2024 was a return to the yields seen in 2021 when the yield of Oasis was much higher.

Maturities in the trial ranged from 0 for Avola to +17 days. Ambassador the late control variety had a maturity of +16, in comparison to its long term average of +12, showing the extended season due to cooler harvest conditions. 5 varieties were in the +1 to +4 range. There was one variety (Kudo) at +6. Then a large group of varieties in the +8 to +12 spread. Oasis was delayed to a +14 as opposed to its typical +11, lots of varieties that were just before and just after Oasis this year, were mature on the same day as it on previous years. PFR 1705, Larango and Obigo hit TR100 later than Oasis in 2024.

PFR 1909 was the highest yielding non Oasis achieving 92% of Oasis's yield at TR 100 and 94% at TR 120. CS-503AF did equally well at TR120 but was worse at TR 100 (71%). It is an early maturing variety making that yield especially impressive. Caballero also had impressive yields for an early variety (78% / 82%).

CS-498AF produced smaller peas than most varieties, with a greater amount of small size grade at both TR100 and TR120. Standing abilities in 2024 were very variable with Lakeshore having a score of 2.0 and CS-498AF having the highest score of 7.0. Bering was the shortest variety.

Standard Pea Preliminary Trial, Nocton – Tables 08 & 09

Fifteen varieties were entered into the Preliminary Trial.

There were no early varieties, maturing at a similar point to Avola. The earliest new preliminary variety was CS-492AF and Felicio both +7. Two Limagrains (RF 7819 and RD 8938), and a Brotherton line (EXP 776), were also a medium maturity with + 8 and +9 days from Avola in a cold/slower season. There were 9 lines that ranged from +11 to +14, with DGL 0067 being the last line to mature at +15 days to Avola.

RF 8938 had a higher yield than Oasis at TR 100 (105%), at TR 120 it was 94%. This is notable for being a high yield in an early maturing variety. RF 7819 is a day earlier and had yields of 85% and 94%. PFR 2248 had a better yield than Oasis at TR 120 (103%) but not at TR 100 (85). Several other varieties also had yields in the 70s and 80s, which is promising for their future performances in different seasons. Riviero had the best standing ability.

Standard Pea Screening Trial, Nocton – Tables 10 & 11

Five screening trial varieties were evaluated.

Avola was the first variety to mature, 14 days before Oasis. CS-549 matured 4 days after Avola. Wav 1772 matured 7 days after Avola. Tirza hit TR 100 3 days before Oasis, Finish 1 day before, and CS-515 on the same day as the yield control.

Wav 1772 and Finish both yielded higher than Oasis at both TR100 and TR 120. Wav 1772 had yields of 113% for both TR values. Finish was 111% of Oasis at TR 100 and 110% at TR 120. CS 549 had a smaller size grade than the others, whilst still having an impressive yield for an early variety (82% / 88%). None of the screening varieties had good standing abilities. CS-549 has darker in colour than most.

Petits Pois Main and Preliminary Trials, Holbeach – Tables 12 & 13

Waverex, the yield standard, failed to grow properly, but a statistical analysis of other established varieties in a neighbouring trial led to a predicted yield value of 7.57 t/ha for TR 100 and 8.74 t/ha for TR 120. Maturities in the table are given against Avola rather than Waverex.

CS-529F was the earliest variety. The latest variety to mature was Zara, thirteen days after Avola (estimated five days after Waverex).

Atom and Wav 336 had notably higher yields than Waverex at TR100 (117/119) and even higher at TR 120 (132/139). Digit had a yield close to Waverex at TR120 (92) but was lower yielding at TR 100 (70). Flovert had a yield that was only just under Waverex at both tenderometer target values (92/91).

The screening lines PLS-705-cu and Bernard had the produce with greatest fraction under 8.75mm diameter (94% and 93%).

The best standing lines were Atasiska, Digit, Bernard and Wav 336.

Varietal Susceptibility of Vining Peas to Downy Mildew (*Peronospora viciae*) - 2024

It is important that untreated seed is entered for trials so that downy mildew susceptibility can be evaluated.

As part of the variety evaluation work, 51 varieties of vining peas were sown in disease observation trials at two locations in Nocton and Fosdyke. Both trials were situated in a field with a history of pea growing. Plants were scored for infection on three occasions during the season, to include both primary systemically infected seedlings and secondary infection on the foliage. The data were combined to give an indication of the relative susceptibility to downy mildew.

Levels of downy mildew were higher than 2023, more comparable to 2022, but control varieties showed high enough levels to allow a good differentiation between varieties.

| Susceptible 1/2 | Moderately Susceptible 3/4 | Slightly Susceptible 5/6 | Moderate Field Resistance 7/8 | Good Field Resistance 9 |
|--------------------|----------------------------------|--------------------------------|-------------------------------------|-------------------------------|
| EXP 776 | Amaya | Bering | Alvario | |
| PL-0001 | Atom | Bernard | Atasiska | |
| | Avola | CS-492AF | Caballero | |
| | BSC 737 | CS-500F | CS-503AF | |
| | CS-498AF | CS-513F | CS-504AF | |
| | CS-515 | EXP 529 | CS-508AF | |
| | Digit | EXP 695 | CS-529F | |
| | Logic | Kotzebue | CS-533F | |
| | Oasis | Kudo | CS-549 | |
| | | Lakeshore | DGL 0067 | |
| | | PFR 1705 | Felicio | |
| | | PFR 1816 | Finish | |
| | | PFR 1909 | Namrata | |
| | | PFR 2232 | Obigo | |
| | | PFR 2248 | RF 8938 | |
| | | PLS-705-cu | Riviero | |
| | | RF 7817 | Romago | |
| | | Tirza | Valbona | |
| | | | Wav 1763 | |
| | | | Wav 1772 | |
| | | | Wav 336 | |
| | | | Zara | |

The results of these tests and those of previous years are incorporated in the PGRO Descriptive List of Vining Pea Varieties.

TABLE 01 – VINING PEA VARIETY EVALUATIONS (22/23/24). Summary of Standard Vining Peas. Varieties completing 3 years of trials in 2022,2023,2024 Nocton. Varieties placed in order of maturity. Standard varieties underlined.

| Variety | Source | 1000 Seed Weight g | @ TR 100 | | | | | | @ TR 120 | | | | | | Haulm length cm | Standing Ability 9=erect 1=lodged | Pea wt. as % of total weight | Raw pea colour 1=pale 6=dark | |
|--------------|--------|-----------------------------|-------------------------------|------------------------|------------------|-----------|-----------|-------------------------------|------------------------|------------------|------------|-----------|-----------|----------|-----------------------|--|---------------------------------------|---------------------------------------|------------|
| | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades | | | | | | | | | |
| | | | | | L | M | SVS | | | L | M | S | VS | | | | | | |
| <u>Avola</u> | | <u>212</u> | <u>0</u> | <u>51</u> | <u>42</u> | <u>42</u> | <u>14</u> | <u>2</u> | <u>+0</u> | <u>59</u> | <u>52</u> | <u>38</u> | <u>9</u> | <u>1</u> | <u>62</u> | <u>3</u> | <u>19</u> | <u>4.8</u> | |
| Amaya | (SL) | Bro | 172 | +3 | 56 | 17 | 51 | 27 | 5 | +3 | 62 | 20 | 60 | 18 | 2 | 58 | 4 | 16 | 4.8 |
| Bering | (SL) | Bro | 166 | +8 | 68 | 16 | 55 | 25 | 4 | +8 | 67 | 22 | 60 | 16 | 2 | 43 | 6 | 19 | 4.9 |
| Logic | (SL) | Bro | 141 | +9 | 52 | 13 | 55 | 27 | 5 | +9 | 56 | 15 | 61 | 21 | 3 | 47 | 4 | 18 | 4.6 |
| PFR 1909 | | PFR | 197 | +9 | 90 | 49 | 45 | 5 | 1 | +9 | 89 | 60 | 36 | 3 | 1 | 48 | 4 | 21 | 4.8 |
| CS-498AF | (SL) | CS | 136 | +10 | 66 | 4 | 37 | 45 | 14 | +10 | 68 | 8 | 45 | 40 | 7 | 54 | 5 | 19 | 4.7 |
| Kotzebue | (SL) | Bro | 202 | +11 | 75 | 38 | 51 | 10 | 1 | +11 | 85 | 52 | 44 | 4 | 0 | 66 | 5 | 19 | 4.8 |
| Lakeshore | | Bro | 237 | +11 | 76 | 67 | 28 | 4 | 1 | +11 | 80 | 80 | 18 | 2 | 0 | 64 | 3 | 21 | 4.7 |
| PFR 1705 | | PFR | 179 | +11 | 79 | 42 | 46 | 10 | 1 | +11 | 82 | 60 | 35 | 4 | 1 | 61 | 5 | 22 | 4.8 |
| <u>Oasis</u> | | <u>LUK</u> | <u>185</u> | <u>+11</u> | <u>100</u> | <u>46</u> | <u>46</u> | <u>7</u> | <u>1</u> | <u>+11</u> | <u>100</u> | <u>55</u> | <u>40</u> | <u>5</u> | <u>0</u> | <u>59</u> | <u>3</u> | <u>23</u> | <u>4.7</u> |
| | | | | | (7.24t/ha) | | | | | (7.58 t/ha) | | | | | | | | | |
| Namrata | (SL) | Bro | 176 | +12 | 57 | 42 | 41 | 14 | 3 | +12 | 58 | 56 | 33 | 8 | 3 | 62 | 5 | 13 | 4.7 |
| Ambassador | | vW | 204 | +12 | 76 | 57 | 36 | 6 | 1 | +12 | 73 | 68 | 28 | 3 | 1 | 71 | 5 | 17 | 4.6 |

KEY: Size grades: L = large > 10.2mm; M = medium 8.75 - 10.2mm; S = small 7.5 - 8.75mm; VS = very small < 7.5mm
SL = Semi-leafless; Source of varieties see Appendix.

TABLE 02 – VINING PEA VARIETY EVALUATIONS (20/23/24). Summary of Standard Vining Peas. Varieties completing 3 years of trials in 2020,2023,2024, Nocton. Varieties placed in order of maturity. Standard varieties underlined.

| Variety | Source | 1000 Seed Weight g | @ TR 100 | | | | | | @ TR 120 | | | | | | Standing Ability 9=erect 1=lodged | Pea wt. as % of total weight | Raw pea colour 1=pale 6=dark | |
|-------------------|------------|--------------------|----------------------------|------------------|------------------------------|-----------|-----------|----------|----------------------------|------------------|------------------------------|-----------|----------|----------|---|------------------------------|------------------------------------|-----------------|
| | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades L M S VS | | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades L M S VS | | | | | | | Haulm length cm |
| <u>Avola</u> | SVS | <u>201</u> | <u>0</u> | <u>45</u> | <u>35</u> | <u>43</u> | <u>18</u> | <u>4</u> | <u>+0</u> | <u>52</u> | <u>52</u> | <u>41</u> | <u>6</u> | <u>1</u> | <u>57</u> | <u>4</u> | <u>19</u> | <u>4.8</u> |
| PFR-1705 | PFR | 190 | +11 | 85 | 38 | 47 | 13 | 2 | +11 | 93 | 57 | 38 | 4 | 1 | 51 | 6 | 24 | 4.7 |
| <u>Oasis</u> | <u>LUK</u> | <u>195</u> | <u>+11</u> | <u>100</u> | <u>45</u> | <u>45</u> | <u>9</u> | <u>1</u> | <u>+11</u> | <u>100</u> | <u>58</u> | <u>37</u> | <u>5</u> | <u>0</u> | <u>52</u> | <u>4</u> | <u>23</u> | <u>4.7</u> |
| | | | | (7.72 t/ha) | | | | | | (8.25 t/ha) | | | | | | | | |
| <u>Ambassador</u> | <u>vW</u> | <u>189</u> | <u>+12</u> | <u>85</u> | <u>46</u> | <u>37</u> | <u>15</u> | <u>3</u> | <u>+12</u> | <u>82</u> | <u>57</u> | <u>36</u> | <u>6</u> | <u>1</u> | <u>63</u> | <u>6</u> | <u>19</u> | <u>4.6</u> |
| Obigo | (SL) Syn | 167 | +12 | 90 | 24 | 54 | 20 | 3 | +12 | 89 | 33 | 56 | 10 | 1 | 61 | 6 | 21 | 4.8 |

KEY: Size grades: L = large > 10.2mm; M = medium 8.75 - 10.2mm; S = small 7.5 - 8.75mm; VS = very small < 7.5mm
SL = Semi-leafless; Source of varieties see Appendix.

TABLE 03 – VINING PEA VARIETY EVALUATIONS (21/22/24). Summary of Standard Vining Peas. Varieties completing 3 years of trials in 2021,2022,2024, Nocton. Varieties placed in order of maturity. Standard varieties underlined.

| Variety | Source | 1000 Seed Weight g | @ TR 100 | | | | | | @ TR 120 | | | | | | Standing Ability 9=erect 1=lodged | Pea wt. as % of total weight | Raw pea colour 1=pale 6=dark | |
|-------------------|------------|--------------------|----------------------------|------------------|------------------------------|-----------|-----------|----------|----------------------------|------------------|------------------------------|-----------|----------|----------|---|------------------------------|------------------------------------|-----------------|
| | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades L M S VS | | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades L M S VS | | | | | | | Haulm length cm |
| <u>Avola</u> | SVS | <u>202</u> | <u>0</u> | <u>44</u> | <u>52</u> | <u>33</u> | <u>13</u> | <u>2</u> | <u>0</u> | <u>48</u> | <u>63</u> | <u>28</u> | <u>8</u> | <u>1</u> | <u>64</u> | <u>4</u> | <u>18</u> | <u>4.7</u> |
| Valbona | (SL/D) CS | 139 | +8 | 61 | 12 | 52 | 31 | 5 | +8 | 63 | 19 | 58 | 21 | 3 | 56 | 6 | 17 | 4.7 |
| <u>Oasis</u> | <u>LUK</u> | <u>187</u> | <u>+11</u> | <u>100</u> | <u>41</u> | <u>50</u> | <u>7</u> | <u>1</u> | <u>+11</u> | <u>100</u> | <u>49</u> | <u>45</u> | <u>5</u> | <u>0</u> | <u>62</u> | <u>2</u> | <u>25</u> | <u>4.7</u> |
| | | | | (8.79t/ha) | | | | | | (9.40t/ha) | | | | | | | | |
| <u>Ambassador</u> | <u>vW</u> | <u>216</u> | <u>+12</u> | <u>77</u> | <u>53</u> | <u>38</u> | <u>7</u> | <u>1</u> | <u>+12</u> | <u>75</u> | <u>65</u> | <u>30</u> | <u>3</u> | <u>1</u> | <u>74</u> | <u>4</u> | <u>18</u> | <u>4.7</u> |

KEY: Size grades: L = large > 10.2mm; M = medium 8.75 - 10.2mm; S = small 7.5 - 8.75mm; VS = very small < 7.5mm
SL = Semi-leafless; Source of varieties see Appendix.

TABLE 04 – VINING PEA VARIETY EVALUATIONS (21/22/24 & 22/23/24). Summary of Petits Pois Vining Peas. Varieties completing 3 years of trials in a combination of 2021,2022,2023,2024, Holbeach. Varieties placed in order of maturity. Standard varieties underlined.

| Variety | Source | 1000 Seed Weight g | @ TR 100 | | | | | | | @ TR 120 | | | | | | | Standing Ability 9=erect 1=lodged | Pea wt. as % of total weight | Raw pea colour 1=pale 6=dark |
|------------------------|----------|-----------------------------|---------------------------------|--------------------------|------------------|----|----|----|---------------------------------|--------------------------|------------------|----|----|----|-----------------------|---|--|---------------------------------------|---------------------------------------|
| | | | Maturity (± days) Waverex | Yield % of Waverex | % in size grades | | | | Maturity (± days) Waverex | Yield % of Waverex | % in size grades | | | | Haulm length cm | | | | |
| <u>22/23/24</u> | | | | | | | | | | | | | | | | | | | |
| Atasiska | (SL) Bro | 109 | -2 | 74 | 3 | 22 | 46 | 30 | -2 | 82 | 4 | 33 | 50 | 13 | 59 | 8 | 15 | 4.6 | |
| Atom | (SL) Bro | 127 | -1 | 118 | 5 | 34 | 45 | 15 | -2 | 126 | 7 | 46 | 35 | 8 | 60 | 7 | 22 | 4.7 | |
| Digit | (SL) Bro | 129 | +0 | 80 | 2 | 21 | 47 | 30 | +0 | 97 | 4 | 32 | 46 | 18 | 57 | 8 | 19 | 4.6 | |
| Waverex | vW | 130 | +0 | 100 | 2 | 18 | 47 | 34 | +0 | 100 | 3 | 28 | 51 | 19 | 52 | 5 | 19 | 4.7 | |
| | | | | (5.85 t/ha) | | | | | | (6.55 t/ha) | | | | | | | | | |
| <u>21/23/24</u> | | | | | | | | | | | | | | | | | | | |
| Waverex | vW | 130 | +0 | 100 | 2 | 21 | 44 | 33 | +0 | 100 | 4 | 34 | 46 | 17 | 52 | 5 | 16 | 4.7 | |
| | | | | (5.33t/ha) | | | | | | (5.87 t/ha) | | | | | | | | | |
| Flovert | Syn | 98 | +2 | 104 | 1 | 15 | 43 | 41 | +2 | 100 | 2 | 20 | 54 | 24 | 64 | 5 | 17 | 4.6 | |

KEY: Size grades: L = large > 10.2mm; M = medium 8.75 - 10.2mm; S = small 7.5 - 8.75mm; VS = very small < 7.5mm
SL = Semi-leafless; Source of varieties see Appendix.

TABLE 05 - VINING PEA VARIETY EVALUATIONS. Summary of quality data for Standard & Petits varieties completing 3 years of trials in 2024.

| Variety | Year | Tenderometer Reading | Appearance | | | | Brix % |
|------------|------|----------------------|--------------|------------------|------------------|---------------------|--------|
| | | | Colour (3-8) | Brightness (1-2) | Uniformity (1-5) | No. of blonds (1-5) | |
| Ambassador | 22 | 97.5 | 6.2 | 1.0 | 4.8 | 1.0 | 12.5 |
| | 23 | 100.5 | 5.3 | 1.0 | 4.5 | 1.0 | 10.6 |
| | 24 | 95.5 | 5.8 | 1.0 | 4.2 | 1.0 | 11.8 |
| Avola | 22 | 102.0 | 5.8 | 1.7 | 4.5 | 1.0 | 12.0 |
| | 23 | 97.5 | 5.0 | 1.0 | 4.0 | 1.0 | 13.0 |
| | 24 | 95.0 | 5.6 | 1.0 | 3.3 | 1.0 | 13.3 |
| Bering | 22 | 103.0 | 6.5 | 1.0 | 4.8 | 1.0 | 14.0 |
| | 23 | 101.5 | 5.3 | 1.0 | 4.5 | 1.0 | 14.5 |
| | 24 | 105.0 | 6.5 | 1.3 | 4.8 | 1.2 | 13.2 |
| Amaya | 22 | 99.5 | 5.8 | 1.0 | 4.8 | 1.0 | 12.4 |
| | 23 | 101.5 | 5.3 | 1.0 | 4.5 | 1.0 | 11.0 |
| | 24 | 101.0 | 5.2 | 1.0 | 3.3 | 1.0 | 12.7 |
| CS-498AF | 22 | 100.0 | 6.7 | 1.0 | 5.0 | 1.0 | 13.4 |
| | 23 | 117.0 | 5.0 | 1.0 | 3.8 | 1.0 | 11.8 |
| | 24 | 102.5 | 6.2 | 1.3 | 4.7 | 1.0 | 14.2 |
| Kotzebue | 22 | 103.0 | 5.8 | 1.0 | 4.7 | 1.0 | 12.4 |
| | 23 | 99.0 | 5.0 | 1.0 | 4.7 | 1.0 | 11.0 |
| | 24 | 98.5 | 5.7 | 1.0 | 4.7 | 1.0 | 13.7 |
| Lakeshore | 22 | 102.0 | 5.7 | 1.0 | 4.0 | 1.5 | 13.3 |
| | 23 | 105.0 | 5.2 | 1.0 | 3.7 | 1.3 | 11.6 |
| | 24 | 98.0 | 5.9 | 1.0 | 4.3 | 2.0 | 13.8 |
| Logic | 22 | 97.0 | 5.7 | 1.0 | 4.5 | 1.0 | 14.0 |
| | 23 | 108.0 | 5.3 | 1.0 | 3.7 | 1.0 | 12.3 |
| | 24 | 107.5 | 5.6 | 1.0 | 3.7 | 1.0 | 13.1 |
| Namrata | 22 | 99.0 | 6.0 | 1.0 | 4.3 | 1.3 | 13.7 |
| | 23 | 99.0 | 5.3 | 1.0 | 4.0 | 1.0 | 10.9 |
| | 24 | 100.0 | 5.9 | 1.0 | 4.3 | 1.0 | 10.8 |
| Oasis | 22 | 100.0 | 5.0 | 1.0 | 2.0 | 4.0 | 11.1 |
| | 23 | 104.0 | 5.3 | 1.0 | 4.3 | 1.0 | 10.5 |
| | 24 | 97.0 | 5.4 | 1.0 | 4.0 | 1.8 | 14.8 |

| | | | | | | | |
|----------|----|-------|-----|-----|-----|-----|------|
| PFR-1909 | 20 | 107.0 | 6.3 | 1.3 | 4.7 | 1.0 | 11.3 |
| | 23 | 98.0 | 5.8 | 1.0 | 4.8 | 1.0 | 9.5 |
| | 24 | 97.5 | 5.8 | 1.0 | 4.7 | 1.3 | 11.9 |
| PFR-1705 | 22 | 99.5 | 5.7 | 1.0 | 4.8 | 1.0 | 14.9 |
| | 23 | 101.0 | 5.8 | 1.0 | 4.8 | 1.0 | 12.4 |
| | 24 | 100.5 | 5.8 | 1.0 | 4.3 | 1.0 | 12.4 |
| Obigo | 20 | 99.0 | 6.3 | 1.7 | 4.8 | 1.0 | 11.8 |
| | 23 | 100.5 | 5.8 | 1.0 | 4.2 | 1.7 | 12.4 |
| | 24 | 99.0 | 6.1 | 1.3 | 3.7 | 1.0 | 11.8 |
| Valbona | 21 | 101.0 | 6.5 | 1.0 | 4.5 | 1.0 | 14.8 |
| | 22 | 101.5 | 6.2 | 1.0 | 5.0 | 1.0 | 14.8 |
| | 24 | 103.0 | 6.3 | 1.0 | 4.0 | 1.3 | 10.8 |
| Flovert | 21 | 102.5 | 6.0 | 1.0 | 4.3 | 1.0 | 11.8 |
| | 23 | 107.0 | 6.0 | 1.0 | 4.2 | 1.0 | 11.4 |
| | 24 | 99.5 | 5.6 | 1.0 | 4.0 | 1.3 | 12.7 |
| Waverex | 21 | 102.5 | 6.0 | 1.0 | 4.0 | 1.0 | 12.4 |
| | 22 | 102.5 | 5.5 | 1.0 | 3.5 | 2.2 | 13.6 |
| | 23 | 105.0 | 5.2 | 1.0 | 5.0 | 1.0 | 12.0 |
| Atom | 22 | 97.5 | 5.7 | 1.0 | 4.7 | 1.0 | 13.5 |
| | 23 | 102.0 | 5.2 | 1.0 | 4.5 | 1.0 | 11.1 |
| | 24 | 97.5 | 5.7 | 1.0 | 3.7 | 1.0 | 11.7 |
| Atasiska | 22 | 99.5 | 6.0 | 1.0 | 4.5 | 1.0 | 13.2 |
| | 23 | 97.0 | 5.5 | 1.0 | 4.0 | 1.3 | 13.6 |
| | 24 | 100.5 | 6.0 | 1.0 | 4.3 | 1.0 | 12.0 |
| Digit | 22 | 112.5 | 6.0 | 1.0 | 4.5 | 1.0 | 12.9 |
| | 23 | 100.5 | 5.7 | 1.7 | 4.2 | 1.3 | 12.3 |
| | 24 | 100.0 | 6.0 | 1.3 | 4.0 | 1.0 | 12.7 |

KEY: Uniformity; Uniformity; No. of blonds: (1-5) - a high figure indicates that the variety shows the character to a high degree

Colour: a high figure indicates a darker green; Brightness: 1 = bright, 2 = dull; Brix - measured using Atago pocket refractometer PAL-1 and gives an indication of sugar content

TABLE 06 – MAIN VINING PEA VARIETY EVALUATIONS Summary of agronomic data Standard Vining Pea Main Variety Trial, Nocton – 2024
 Varieties placed in order of maturity. Standard varieties underlined. All varieties sown on 27th March.
 Results are means of three replicates. Target population 100 plants per m² sown in eight 18 cm rows.

| Variety | Source | 1000 Seed Weight g | @ TR 100 | | | | | | | @ TR 120 | | | | | | | Standing Ability 9=erect 1=lodged | Pea wt. as % of total weight | Raw pea colour 1=pale 6=dark |
|-------------------|------------|-----------------------------|-------------------------------|--------------------------|---------------------|-----------|-----------|----------|-------------------------------|--------------------------|------------------|-----------|-----------|----------|-----------------------|------------|--|---------------------------------------|---------------------------------------|
| | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades | | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades | | | | Haulm length cm | | | | |
| | | | | | L | M | S | VS | | | L | M | S | VS | | | | | |
| <u>Avola</u> | <u>SVS</u> | <u>211</u> | <u>0</u> (25/6) | <u>35</u> | <u>45</u> | <u>34</u> | <u>18</u> | <u>3</u> | <u>0</u> (28/6) | <u>47</u> | <u>51</u> | <u>35</u> | <u>12</u> | <u>2</u> | <u>67</u> | <u>3.7</u> | <u>18</u> | <u>5.1</u> | |
| Alvario | vW | 168 | +1 | 42 | 27 | 48 | 22 | 3 | +1 | 61 | 40 | 50 | 9 | 1 | 56 | 4.0 | 17 | 4.9 | |
| CS-504AF | (SL) CS | 249 | +2 | 68 | 29 | 53 | 16 | 2 | +1 | 70 | 36 | 55 | 8 | 1 | 66 | 4.7 | 18 | 4.9 | |
| Amaya | (SL) Bro | 175 | +3 | 48 | 13 | 42 | 38 | 7 | +2 | 61 | 14 | 61 | 24 | 1 | 62 | 4.0 | 15 | 4.8 | |
| CS-503AF | (SL) CS | 185 | +4 | 71 | 19 | 55 | 24 | 2 | +3 | 94 | 21 | 61 | 17 | 1 | 61 | 4.7 | 23 | 5.2 | |
| Caballero | (SL) vW | 145 | +4 | 78 | 10 | 45 | 38 | 7 | +5 | 82 | 18 | 59 | 21 | 2 | 64 | 5.0 | 19 | 5.0 | |
| Kudo | Syn | 183 | +6 | 47 | 20 | 56 | 21 | 3 | +5 | 70 | 32 | 62 | 5 | 1 | 67 | 4.3 | 13 | 5.1 | |
| Romago | (SL) Syn | 163 | +8 | 55 | 20 | 63 | 16 | 1 | +7 | 53 | 25 | 65 | 9 | 1 | 69 | 5.0 | 13 | 5.0 | |
| Valbona | (SL/D) CS | 161 | +8 | 48 | 15 | 53 | 27 | 5 | +7 | 57 | 20 | 56 | 21 | 3 | 61 | 6.7 | 13 | 4.9 | |
| CS-508AF | (SL) CS | 172 | +8 | 84 | 19 | 57 | 22 | 2 | +8 | 85 | 23 | 65 | 11 | 1 | 54 | 6.7 | 19 | 4.9 | |
| Bering | (SL) Bro | 156 | +9 | 58 | 17 | 49 | 28 | 6 | +8 | 57 | 25 | 58 | 15 | 2 | 45 | 6.7 | 17 | 4.8 | |
| Logic | (SL) Bro | 136 | +9 | 48 | 14 | 53 | 28 | 5 | +10 | 46 | 17 | 59 | 21 | 3 | 50 | 4.5 | 17 | 4.6 | |
| CS-498AF | (SL) CS | 118 | +11 | 50 | 7 | 39 | 39 | 15 | +11 | 54 | 12 | 49 | 32 | 7 | 59 | 7.0 | 16 | 4.7 | |
| PFR 1816 | PFR | 187 | +11 | 82 | 36 | 54 | 9 | 1 | +11 | 85 | 55 | 42 | 3 | 0 | 59 | 3.0 | 20 | 4.8 | |
| PFR 1909 | PFR | 204 | +11 | 92 | 51 | 43 | 5 | 1 | +11 | 94 | 68 | 29 | 2 | 1 | 58 | 3.3 | 21 | 4.7 | |
| Namrata | (SL) Bro | 196 | +12 | 77 | 51 | 40 | 8 | 1 | +11 | 73 | 78 | 21 | 1 | 0 | 84 | 5.3 | 14 | 4.7 | |
| Lakeshore | Bro | 223 | +12 | 74 | 71 | 24 | 4 | 1 | +12 | 76 | 87 | 12 | 1 | 0 | 72 | 2.0 | 18 | 4.8 | |
| <u>Oasis</u> | <u>LUK</u> | <u>198</u> | <u>+14</u> | <u>100</u> (9.18t/ha) | <u>44</u> | <u>48</u> | <u>7</u> | <u>1</u> | <u>+12</u> | <u>100</u> (9.70t/ha) | <u>59</u> | <u>37</u> | <u>4</u> | <u>0</u> | <u>65</u> | <u>3.0</u> | <u>23</u> | <u>4.8</u> | |
| Kotzebue | (SL) Bro | 218 | +14 | 68 | 46 | 46 | 7 | 1 | +13 | 80 | 64 | 34 | 2 | 0 | 77 | 4.0 | 17 | 4.9 | |
| PFR 1705 | PFR | 163 | +15 | 67 | 53 | 35 | 10 | 2 | +15 | 75 | 76 | 22 | 2 | 0 | 67 | 6.7 | 20 | 5.2 | |
| Larango | Syn | 156 | +16 | 84 | 52 | 34 | 11 | 3 | +15 | 85 | 64 | 28 | 7 | 1 | 80 | 3.3 | 21 | 4.9 | |
| <u>Ambassador</u> | <u>vW</u> | <u>224</u> | <u>+16</u> | <u>70</u> | <u>62</u> | <u>30</u> | <u>7</u> | <u>1</u> | <u>+15</u> | <u>67</u> | <u>72</u> | <u>24</u> | <u>3</u> | <u>1</u> | <u>77</u> | <u>4.0</u> | <u>17</u> | <u>4.8</u> | |
| Obigo | (SL) Syn | 155 | +17 | 72 | 33 | 48 | 16 | 3 | +16 | 73 | 42 | 44 | 11 | 3 | 79 | 5.7 | 17 | 4.9 | |

KEY: Size grades: L = large > 10.2mm; M = medium 8.75 - 10.2mm; S = small 7.5 - 8.75mm; VS = very small < 7.5mm
 SL = Semi-leafless; D=Determinate, Source of varieties see Appendix.

TABLE 07 - VINING PEA VARIETY EVALUATIONS. Summary of quality data - Standard Vining Pea Main Variety Trial, Nocton – 2024

| Variety | Tenderometer Reading | Appearance | | | No. of blonds (1-5) | Brix % |
|-------------------|----------------------|-----------------|---------------------|---------------------|------------------------|-------------|
| | | Colour (3-8) | Brightness (1-2) | Uniformity (1-5) | | |
| <u>Avola</u> | <u>99.5</u> | <u>5.6</u> | <u>1.0</u> | <u>3.3</u> | <u>1.0</u> | <u>13.3</u> |
| Alvario | 99.0 | 6.0 | 1.3 | 3.5 | 1.0 | 14.5 |
| CS-504AF | 99.5 | 5.5 | 1.0 | 3.8 | 1.0 | 13.5 |
| Amaya | 101.0 | 5.2 | 1.0 | 4.3 | 1.0 | 12.7 |
| CS-503AF | 106.5 | 5.6 | 1.0 | 4.2 | 1.0 | 11.5 |
| Caballero | 96.0 | 5.8 | 1.0 | 3.3 | 1.3 | 13.7 |
| Kudo | 96.5 | 5.6 | 1.0 | 3.5 | 1.8 | 14.0 |
| Romago | 102.0 | 5.6 | 1.0 | 3.5 | 1.2 | 13.5 |
| Valbona | 103.0 | 6.3 | 1.0 | 4.0 | 1.3 | 10.8 |
| CS-508AF | 99.0 | 5.7 | 1.0 | 4.7 | 1.0 | 13.7 |
| Bering | 105.0 | 6.5 | 1.3 | 4.8 | 1.2 | 13.2 |
| Logic | 107.5 | 5.6 | 1.0 | 3.7 | 1.0 | 13.1 |
| CS-498AF | 102.5 | 6.2 | 1.3 | 4.7 | 1.0 | 14.2 |
| PFR-1816 | 99.5 | 5.8 | 1.0 | 4.2 | 1.2 | 14.3 |
| PFR-1909 | 97.5 | 5.8 | 1.0 | 4.7 | 1.3 | 11.9 |
| Namrata | 100.0 | 5.9 | 1.0 | 4.3 | 1.0 | 10.8 |
| Lakeshore | 98.0 | 5.9 | 1.0 | 4.3 | 2.0 | 13.8 |
| <u>Oasis</u> | <u>97.0</u> | <u>5.4</u> | <u>1.0</u> | <u>4.0</u> | <u>1.8</u> | <u>14.8</u> |
| Kotzebue | 98.5 | 5.7 | 1.0 | 4.7 | 1.0 | 13.7 |
| PFR-1705 | 100.5 | 5.8 | 1.0 | 4.3 | 1.0 | 12.4 |
| <u>Ambassador</u> | <u>95.5</u> | <u>5.8</u> | <u>1.0</u> | <u>4.2</u> | <u>1.0</u> | <u>11.8</u> |
| Larango | 105.0 | 6.2 | 1.3 | 3.5 | 2.0 | 11.8 |
| Obigo | 99.0 | 6.1 | 1.3 | 3.7 | 1.0 | 11.8 |

KEY: Uniformity; Uniformity; No. of blonds; (1-5) - a high figure indicates that the variety shows the character to a high degree

Colour: a high figure indicates a darker green; Brightness: 1 = bright, 2 = dull; Brix - measured using Atago pocket refractometer PAL-1 and gives an indication of sugar content

TABLE 08 - VINING PEA VARIETY EVALUATIONS: PRELIMINARY TRIAL Summary of agronomic data Standard Vining Pea Preliminary Variety Trial, Nocton – 2024. Varieties placed in order of maturity. Standard varieties underlined. All varieties sown on 27th March. Results are means of three replicates. Target population 100 plants per m² sown in eight 18 cm rows.

| Variety | Source | 1000 Seed Weight g | @ TR 100 | | | | | | | @ TR 120 | | | | | | | Standing Ability 9=erect 1=lodged | Pea wt. as % of total weight | Raw pea colour 1=pale 6=dark |
|-------------------|------------|-----------------------------|-------------------------------|--------------------------|---------------------|-----------|-----------|----------|-------------------------------|--------------------------|------------------|-----------|-----------|----------|--------------|------------|--|---------------------------------------|---------------------------------------|
| | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades | | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades | | | | Length Cm | | | | |
| | | | | | L | M | S | VS | | | L | M | S | VS | | | | | |
| <u>Avola</u> | <u>SVS</u> | <u>211</u> | <u>0</u> (25/6) | <u>35</u> | <u>45</u> | <u>34</u> | <u>18</u> | <u>3</u> | <u>0</u> (28/6) | <u>47</u> | <u>51</u> | <u>35</u> | <u>12</u> | <u>2</u> | <u>67</u> | <u>3.7</u> | <u>18</u> | <u>5.1</u> | |
| CS-492AF | (SL) CS | 194 | +7 | 60 | 21 | 53 | 21 | 5 | +7 | 57 | 23 | 59 | 15 | 3 | 44 | 6.7 | 16 | 4.9 | |
| Felicio | (SL) vW | 195 | +7 | 59 | 49 | 43 | 6 | 2 | +7 | 56 | 65 | 31 | 3 | 1 | 64 | 5.3 | 13 | 4.9 | |
| RF 7819 | LUK | 148 | +8 | 85 | 12 | 49 | 34 | 5 | +7 | 94 | 14 | 59 | 25 | 2 | 63 | 2.0 | 19 | 4.7 | |
| RF 8938 | LUK | 180 | +9 | 105 | 25 | 64 | 10 | 1 | +8 | 99 | 30 | 63 | 6 | 1 | 70 | 3.3 | 21 | 4.9 | |
| EXP 776 | Bro | 197 | +9 | 72 | 33 | 57 | 9 | 1 | +9 | 75 | 40 | 53 | 6 | 1 | 55 | 2.7 | 22 | 4.9 | |
| EXP 695 | (SL) Bro | 184 | +11 | 58 | 35 | 50 | 12 | 3 | +10 | 55 | 50 | 43 | 5 | 2 | 65 | 4.0 | 15 | 4.9 | |
| CS-500F | CS | 164 | +11 | 85 | 41 | 48 | 9 | 2 | +10 | 80 | 59 | 36 | 4 | 1 | 68 | 3.3 | 20 | 4.8 | |
| PFR 2248 | PFR | 189 | +11 | 84 | 41 | 49 | 9 | 1 | +11 | 103 | 51 | 49 | 0 | 0 | 74 | 2.7 | 22 | 4.8 | |
| EXP 529 | (SL) Bro | 190 | +11 | 45 | 27 | 55 | 15 | 3 | +11 | 46 | 41 | 54 | 4 | 1 | 66 | 5.7 | 12 | 4.8 | |
| PFR 2232 | PFR | 193 | +12 | 84 | 41 | 43 | 13 | 3 | +12 | 91 | 59 | 34 | 6 | 1 | 61 | 2.3 | 19 | 5.0 | |
| BSC 737 | (SL) Bro | 173 | +13 | 31 | 38 | 51 | 10 | 1 | +12 | 38 | 52 | 44 | 4 | 0 | 66 | 6.3 | 9 | 4.9 | |
| CS-513F | CS | 132 | +13 | 87 | 29 | 54 | 15 | 2 | +12 | 84 | 45 | 50 | 5 | 0 | 75 | 2.3 | 19 | 4.9 | |
| Wav 1763 | vW | 173 | +14 | 48 | 63 | 24 | 7 | 6 | +13 | 61 | 71 | 17 | 6 | 6 | 80 | 3.0 | 12 | 4.7 | |
| Riviero | (SL) vW | 238 | +14 | 45 | 58 | 25 | 10 | 7 | +14 | 43 | 69 | 17 | 7 | 7 | 78 | 7.0 | 9 | 4.9 | |
| <u>Oasis</u> | <u>LUK</u> | <u>198</u> | <u>+14</u> | <u>100</u> (9.18t/ha) | <u>44</u> | <u>48</u> | <u>7</u> | <u>1</u> | <u>+12</u> | <u>100</u> (9.70t/ha) | <u>59</u> | <u>37</u> | <u>4</u> | <u>0</u> | <u>65</u> | <u>3.0</u> | <u>23</u> | <u>4.8</u> | |
| DGL 0067 | Syn | 166 | +15 | 79 | 51 | 42 | 6 | 1 | +14 | 76 | 62 | 35 | 3 | 0 | 75 | 2.7 | 16 | 4.9 | |
| <u>Ambassador</u> | <u>vW</u> | <u>224</u> | <u>+16</u> | <u>70</u> | <u>62</u> | <u>30</u> | <u>7</u> | <u>1</u> | <u>+15</u> | <u>67</u> | <u>72</u> | <u>24</u> | <u>3</u> | <u>1</u> | <u>77</u> | <u>4.0</u> | <u>17</u> | <u>4.8</u> | |

KEY: Size grades: L = large > 10.2mm; M = medium 8.75 - 10.2mm; S = small 7.5 - 8.75mm; VS = very small < 7.5mm
SL = Semi-leafless; D=Determinate; Source of varieties see Appendix.

TABLE 09 - VINING PEA VARIETY EVALUATIONS. Summary of quality data - Standard Vining Pea Main Variety Trial, Nocton – 2024

| Variety | Tenderometer Reading | Appearance | | | | Brix % |
|------------|----------------------|--------------|------------------|------------------|---------------------|--------|
| | | Colour (3-8) | Brightness (1-2) | Uniformity (1-5) | No. of blonds (1-5) | |
| Avola | 99.5 | 5.6 | 1.0 | 3.3 | 1.0 | 13.3 |
| CS-492AF | 106.5 | 5.7 | 1.0 | 4.7 | 1.0 | 12.2 |
| Felicio | 100.0 | 5.8 | 1.0 | 5.0 | 1.0 | 13.4 |
| RF 7819 | 99.0 | 5.8 | 1.0 | 3.8 | 1.0 | 12.2 |
| RF 8938 | 100.0 | 5.9 | 1.0 | 3.5 | 1.8 | 13.7 |
| EXP 776 | 95.0 | 5.7 | 1.0 | 4.0 | 1.0 | 11.4 |
| EXP 695 | 101.0 | 6.1 | 1.0 | 3.7 | 1.0 | 14.1 |
| CS-500F | 99.5 | 5.4 | 1.0 | 3.7 | 2.0 | 14.0 |
| PFR 2248 | 100.5 | 5.6 | 1.0 | 3.2 | 1.2 | 10.6 |
| EXP 529 | 99.0 | 5.6 | 1.0 | 3.8 | 1.0 | 11.5 |
| PFR 2232 | 100.0 | 5.7 | 1.3 | 3.0 | 2.0 | 13.0 |
| BSC 737 | 101.0 | 6.0 | 1.0 | 4.2 | 1.0 | 13.5 |
| CS-513F | 99.5 | 5.6 | 1.0 | 3.7 | 1.2 | 12.3 |
| Oasis | 97.0 | 5.4 | 1.0 | 4.0 | 1.8 | 14.8 |
| WAV 1763 | 100.5 | 5.4 | 1.0 | 3.3 | 2.2 | 13.8 |
| Riviero | 100.0 | 5.7 | 1.0 | 3.3 | 1.2 | 11.3 |
| DGL 0067 | 100.5 | 5.5 | 1.0 | 2.5 | 2.7 | 11.9 |
| Ambassador | 95.5 | 5.8 | 1.0 | 4.2 | 1.0 | 11.8 |

KEY: Uniformity; Uniformity; No. of blonds; (1-5) - a high figure indicates that the variety shows the character to a high degree

Colour: a high figure indicates a darker green; Brightness: 1 = bright, 2 = dull; Brix - measured using Atago pocket refractometer PAL-1 and gives an indication of sugar content

TABLE 10 - VINING PEA VARIETY EVALUATIONS: SCREENING TRIAL. Summary of agronomic data Standard Vining Pea Screening Variety Trial, Nocton – 2024. Varieties placed in order of maturity. Standard varieties underlined. All varieties sown on 27th March. Results are means of two replicates. Target population 100 plants per m² sown in eight 18 cm rows.

| Variety | Source | 1000 Seed Weight g | @ TR 100 | | | | | | | @ TR 120 | | | | | | | Standing Ability 9=erect 1=lodged | Pea wt. as % of total weight | Raw pea colour 1=pale 6=dark |
|-------------------|------------|-----------------------------|-------------------------------|--------------------------|---------------------|-----------|-----------|----------|-------------------------------|--------------------------|------------------|-----------|-----------|----------|-----------------------|------------|--|---------------------------------------|---------------------------------------|
| | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades | | | | Maturity (± days) Avola | Yield % of Oasis | % in size grades | | | | Haulm length cm | | | | |
| | | | | | L | M | S | VS | | | L | M | S | VS | | | | | |
| <u>Avola</u> | <u>SVS</u> | <u>211</u> | <u>0</u> (25/6) | <u>34</u> | <u>49</u> | <u>31</u> | <u>17</u> | <u>3</u> | <u>0</u> (28/6) | <u>50</u> | <u>49</u> | <u>36</u> | <u>13</u> | <u>2</u> | <u>67</u> | <u>3.7</u> | <u>18</u> | <u>5.1</u> | |
| CS-549 | CS | 129 | + 4 | 82 | 14 | 40 | 39 | 7 | + 3 | 88 | 16 | 49 | 31 | 4 | 68 | 2.5 | 24 | 5.3 | |
| Wav 1772 | vW | 200 | + 7 | 113 | 27 | 55 | 16 | 2 | + 5 | 113 | 34 | 57 | 8 | 1 | 68 | 2.0 | 27 | 5.1 | |
| Tirza | (SL) ZKI | 189 | +11 | 54 | 35 | 56 | 8 | 1 | +11 | 50 | 52 | 42 | 5 | 1 | 72 | 4.5 | 16 | 5.0 | |
| Finish | ZKI | 200 | +13 | 111 | 42 | 47 | 9 | 2 | +13 | 110 | 60 | 38 | 2 | 0 | 75 | 3.0 | 20 | 4.8 | |
| CS-515 | (SL) CS | 164 | +14 | 41 | 34 | 44 | 16 | 6 | +13 | 43 | 48 | 40 | 9 | 3 | 64 | 4.5 | 12 | 4.8 | |
| <u>Oasis</u> | <u>LUK</u> | <u>198</u> | <u>+14</u> | <u>100</u> (8.84t/ha) | <u>40</u> | <u>51</u> | <u>8</u> | <u>1</u> | <u>+12</u> | <u>100</u> (9.44t/ha) | <u>56</u> | <u>40</u> | <u>4</u> | <u>0</u> | <u>65</u> | <u>3.0</u> | <u>23</u> | <u>4.8</u> | |
| <u>Ambassador</u> | <u>vW</u> | <u>224</u> | <u>+16</u> | <u>67</u> | <u>60</u> | <u>31</u> | <u>7</u> | <u>2</u> | <u>+15</u> | <u>68</u> | <u>73</u> | <u>23</u> | <u>3</u> | <u>1</u> | <u>77</u> | <u>4.0</u> | <u>17</u> | <u>4.8</u> | |

KEY: Size grades: L = large > 10.2mm; M = medium 8.75 - 10.2mm; S = small 7.5 - 8.75mm; VS = very small < 7.5mm
SL = Semi-leafless, Source of varieties see Appendix.

TABLE 11 - VINING PEA VARIETY EVALUATIONS. Summary of quality data - Standard Vining Pea Main Variety Trial, Nocton – 2024

| Variety | Tenderometer Reading | Appearance | | | | Brix % |
|-------------------|----------------------|--------------|------------------|------------------|---------------------|-------------|
| | | Colour (3-8) | Brightness (1-2) | Uniformity (1-5) | No. of blonds (1-5) | |
| <u>Avola</u> | <u>99.5</u> | <u>5.6</u> | <u>1.0</u> | <u>3.3</u> | <u>1.0</u> | <u>13.3</u> |
| CS-549 | 105.5 | 6.1 | 1.3 | 2.8 | 2.7 | 13.9 |
| Wav 1772 | 105.5 | 5.7 | 1.0 | 4.3 | 1.0 | 13.0 |
| Tirza | 107.5 | 6.3 | 1.3 | 4.3 | 1.0 | 12.1 |
| Finish | 94.5 | 5.5 | 1.0 | 3.2 | 2.8 | 14.4 |
| CS-515 | 102.0 | 5.8 | 1.0 | 4.7 | 1.3 | 12.8 |
| <u>Oasis</u> | <u>97.0</u> | <u>5.4</u> | <u>1.0</u> | <u>4.0</u> | <u>1.8</u> | <u>14.8</u> |
| <u>Ambassador</u> | <u>95.5</u> | <u>5.8</u> | <u>1.0</u> | <u>4.2</u> | <u>1.0</u> | <u>11.8</u> |

KEY: Uniformity; Uniformity; No. of blonds; (1-5) - a high figure indicates that the variety shows the character to a high degree

Colour: a high figure indicates a darker green; Brightness: 1 = bright, 2 = dull; Brix - measured using Atago pocket refractometer PAL-1 and gives an indication of sugar content

TABLE 12 - VINING PEA VARIETY EVALUATIONS: PETITS POIS MAIN/PRELIMINARY/SCREENING TRIAL. Summary of agronomic data Petits Pois Vining Pea Variety Trial, Nocton – 2024. Varieties placed in order of maturity, maturity is relative to Avola. Standard varieties underlined. All varieties sown on 26th April. Control variety of Waverex failed in 2024. Its yield was estimated by using other established varieties grown in the same field alongside historical Waverex data. Main & Prelim results are means of three replicates; Screening trials are the mean of two replicates. Target population 100 plants per m² sown in eight 18 cm rows.

| Variety | Source | 1000 Seed Weight g | @ TR 100 | | | | | | | @ TR 120 | | | | | | | Standing Ability 9=erect 1=lodged | Pea wt. as % of total weight | Raw pea colour 1=pale 6=dark |
|--------------------------|------------|-----------------------------|-------------------------------|--------------------------|---------------------|-----------|----------|----------|-------------------------------|--------------------------|------------------|-----------|----------|----------|-----------------------|------------|--|---------------------------------------|---------------------------------------|
| | | | Maturity (± days) Avola | Yield % of Waverex | % in size grades | | | | Maturity (± days) Avola | Yield % of Waverex | % in size grades | | | | Haulm length cm | | | | |
| | | | | | L | M | S | VS | | | L | M | S | VS | | | | | |
| MAIN & PRELIM | | | | | | | | | | | | | | | | | | | |
| <u>Avola</u> | <u>SVS</u> | <u>211</u> | <u>0</u> (9/7) | <u>67</u> (5.09t/ha) | <u>69</u> | <u>20</u> | <u>7</u> | <u>4</u> | <u>0</u> (13/7) | <u>73</u> (6.42t/ha) | <u>76</u> | <u>15</u> | <u>8</u> | <u>1</u> | <u>72</u> | <u>3.0</u> | <u>19</u> | <u>4.8</u> | |
| Atasiska | (SL) Bro | 101 | + 7 | 76 | 4 | 25 | 41 | 30 | + 6 | 87 | 6 | 37 | 49 | 8 | 64 | 8.0 | 16 | 4.6 | |
| Digit | (SL) Bro | 112 | + 8 | 70 | 3 | 23 | 45 | 29 | + 7 | 92 | 6 | 38 | 39 | 17 | 62 | 7.3 | 17 | 4.6 | |
| <u>Waverex</u> | | | <u>+8</u> | <u>100</u> (7.57t/ha) | | | | | <u>+8</u> | <u>100</u> (8.74t/ha) | | | | | | | | | |
| Atom | (SL) Bro | 148 | + 9 | 117 | 7 | 39 | 40 | 14 | + 7 | 132 | 8 | 50 | 33 | 9 | 65 | 3.7 | 24 | 4.8 | |
| Wav 336 | (SL) vW | 173 | + 9 | 119 | 9 | 41 | 38 | 12 | + 9 | 139 | 11 | 54 | 29 | 6 | 84 | 7.5 | 20 | 4.8 | |
| DGF0086 | Syn | 108 | +10 | 56 | 6 | 35 | 35 | 24 | +10 | 48 | 7 | 34 | 36 | 23 | 62 | 3.0 | 10 | 4.7 | |
| Flovert | Syn | 97 | +11 | 92 | 2 | 19 | 41 | 38 | +10 | 91 | 3 | 26 | 49 | 22 | 70 | 3.7 | 17 | 4.7 | |
| Bernard | (SL) PLS | 83 | +13 | 58 | 1 | 6 | 37 | 56 | +11 | 69 | 1 | 10 | 45 | 44 | 46 | 8.0 | 15 | 4.5 | |
| Zara | (SL) vW | 97 | +17 | 54 | 1 | 8 | 46 | 45 | +16 | 46 | 1 | 13 | 52 | 34 | 75 | 6.7 | 8 | 4.9 | |
| SCREENING | | | | | | | | | | | | | | | | | | | |
| CS-529F | CS | 106 | + 3 | 76 | 8 | 37 | 33 | 22 | + 3 | 84 | 10 | 42 | 38 | 10 | 64 | 2.0 | 21 | 4.6 | |
| PLS-705-cu | PLS | 80 | +10 | 71 | 0 | 6 | 41 | 53 | +10 | 69 | 0 | 7 | 55 | 38 | 61 | 3.5 | 13 | 4.4 | |
| PL-0001 | (SL) PLS | 88 | +13 | 108 | 3 | 25 | 45 | 27 | +12 | 107 | 4 | 32 | 49 | 15 | 66 | 3.0 | 20 | 5.0 | |
| CS-533F | CS | 95 | +13 | 51 | 3 | 25 | 38 | 34 | +13 | 59 | 5 | 34 | 40 | 21 | 64 | 4.5 | 14 | 4.8 | |

KEY: Size grades: L = large > 10.2mm; M = medium 8.75 - 10.2mm; S = small 7.5 - 8.75mm; VS = very small < 7.5mm
SL = Semi-leafless; Source of varieties see Appendix.

TABLE 13 - VINING PEA VARIETY EVALUATIONS. Summary of quality data – Petits Pois Vining Pea Variety Trial, Nocton – 2024

| Variety | Tenderometer Reading | Appearance | | | | Brix % |
|------------|----------------------|--------------|------------------|------------------|---------------------|--------|
| | | Colour (3-8) | Brightness (1-2) | Uniformity (1-5) | No. of blonds (1-5) | |
| CS-529F | 96.5 | 5.5 | 1.0 | 3.7 | 1.0 | 10.9 |
| Atasiska | 100.5 | 6.0 | 1.0 | 4.3 | 1.0 | 12.0 |
| Digit | 100.0 | 6.0 | 1.3 | 4.0 | 1.0 | 12.7 |
| Atom | 97.5 | 5.7 | 1.0 | 3.7 | 1.0 | 11.7 |
| Wav 226 | 103.5 | 5.0 | 1.0 | 2.8 | 1.5 | 10.8 |
| DGF0086 | 96.5 | 5.2 | 1.0 | 3.5 | 1.3 | 10.9 |
| PLS-705-cu | 101.5 | 5.2 | 1.0 | 3.8 | 1.7 | 10.5 |
| Flovert | 99.5 | 5.6 | 1.0 | 4.0 | 1.3 | 12.7 |
| Bernard | 102.0 | 5.9 | 1.0 | 4.7 | 1.0 | 10.9 |
| PL-0001 | 85.5 | 5.8 | 1.3 | 3.5 | 1.0 | 11.5 |
| CS-533F | 102.0 | 5.8 | 1.0 | 3.3 | 1.3 | 10.5 |
| Zara | 101.5 | 5.6 | 1.0 | 3.8 | 1.0 | 11.3 |

KEY: Uniformity; Uniformity; No. of blonds; (1-5) - a high figure indicates that the variety shows the character to a high degree

Colour: a high figure indicates a darker green; Brightness: 1 = bright, 2 = dull; Brix - measured using Atago pocket refractometer PAL-1 and gives an indication of sugar content.

APPENDIX 1

KEY TO SOURCE OF VARIETIES

| | |
|-----|---|
| Bro | Brotherton Seed Company, USA |
| CS | Crites Seed Inc., USA |
| EI | Elsoms Seeds Ltd, UK |
| GA | General Availability |
| LUK | Limagrain UK Ltd, UK |
| PFR | The New Zealand Institute for Plant and Food Research Ltd |
| PLS | Pure Line Seeds Inc., USA |
| SVS | Seminis Vegetable Seeds, UK |
| Syn | Syngenta Seeds, UK |
| vW | van Waveren, Germany |
| ZKI | ZKI, Hungary |