



#### **PACTS Trials Information**



#### The purpose of PACTS® Trials

Whether a particular maize hybrid realises its full genetic potential depends largely upon how well it is adapted to the local environment and how successfully it is managed. The PACTS Trial Results are provided to help growers identify which Pioneer hybrids may be suited to their own location and circumstances. Trial protocols, including sowing and harvest date determination, reflect actual practice on the host farm. The absolute yields reported reflect the yield of the harvested plot only. Corresponding field yields will likely be significantly lower due to the inclusion of lower yielding headlands and normal field variability.

#### Layout

Each PACTS Trial is established within a commercial crop of maize and is planted and harvested by the host farmer with the assistance of Pioneer staff. The trial receives the same treatments as the entire field. A PACTS® trial is generally comprised of between 15 and 20 plots. The plots are planted in identically sized marked areas adjacent to each other across a uniform part of the selected field. Each plot is typically 6 or 8 rows wide, and usually 50 metres in length. At some locations, every fourth strip is the same hybrid and is planted to the Control variety. Repeated Control plots provide data that enables allowance to be made for the effect of varying soil conditions across a trial. In 2025 the Control hybrid for open forage sites was the hybrid P7034.

#### Sites

Each trial site is classified as being Favourable or Less Favourable depending upon the heat accumulation that would typically be measured at that location. Growers should always seek appropriate advice to determine whether a particular field is suitable for maize production, and if so, whether it can be classed as favourable or less favourable. The results from individual trials are detailed, occasionally due to space restrictions occasionally some trials are not shown. The results from any trial not shown are available on request.

#### **Competitor Hybrids**

In some trials a selection of varieties from competitor companies, that have been widely grown commercially in recent years, are included in the layout. The competitor hybrids used in 2025 were Gema, Conclusion, Saxon, KWS Pasco and KWS Cito.

#### **Analysis**

Every PACTS plot is sampled at harvest for dry matter and full quality analysis. Tested parameters include dry matter content, starch content, whole plant digestibility, neutral detergent fibre (NDF) and rumen degradable starch.





### **Maize Hybrid Selection**



The selection of a particular hybrid for cultivation inevitably varies according to the different criteria a grower has. In many situations yield is of paramount importance but earliness of maturity and silage quality are examples of other important quality factors. No single hybrid will suit all situations.

The following factors are just a few of key ones that can have a major impact on the quantity and quality of the maize crop produced.

The Environment	Genetics	Crop Husbandry
Latitude	Yield potential	Seedbed quality
Soil type	Early vigour	Drilling date
Altitude	Disease resistance	Planting population
Aspect	Maturity	Fertiliser policy
Shelter	Standing power	Use of The Samco System
Crop Quality	Crop Handling	End Use
Starch content	Chop length	Fed as silage or grain
Wholeplant digestibility	Kernel processing	For biogas production
Rumen degradable starch	Silage compaction	Supplementation
Yeast and mould content	Silage sealing	Consistency
Fibre digestibility	Effluent	Yeast and mould content

Growing a successful maize crop depends upon selecting a hybrid with the most appropriate genetic potential, growing it on an appropriate site and managing it in a manner that will meet the chosen objectives.







## Hybrid Agronomic Descriptions



#### **PACTS Hybrid Maize Agronomic Descriptions**

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PACTS Multi		FAO# Maturity		Stover Dry-Down	Soil Type Adaption				Relative	Relative Eyespot		
Hybrid	Average Silage Dry Matter Content, Open Sites	Ratings Scale based on PACTS Results	Relative Silage Maturity Description	Approaching Physiogical Maturity	Light	Medium	Heavy	Relative Early Vigour Description	Lodging Resistance	Resistance Rating* (1-9)	Grain Endosperm Texture, Score & Description	
P68106 - NEW	40.5%	160	EXTRA EARLY	FAST	✓	✓	✓	EXTREMELY GOOD	VERY GOOD	8.4	4/5, DENT LIKE	
P7179	39.3%	170	EXTRA EARLY	FAST	✓	✓	✓	VERY GOOD	VERY GOOD	8.0	2/5, FLINT LIKE	
P7326	37.9%	180	EXTRA EARLY	FAST	✓	✓	✓	VERY GOOD	GOOD	6.2	2/5 FLINT / FLINT DENT	
P72847 - NEW	37.5%	180	EXTRA EARLY	VERY FAST	✓	✓	✓	VERY GOOD	MODERATE	7.0	2/5 FLINT-DENT	
P7034	36.5%	180	VERY EARLY	MODERATE	✓	✓		GOOD	GOOD	5.4	4/5, DENT LIKE	
P7381	35.7%	185	VERY EARLY	FAST	✓	✓	✓	GOOD	VERY GOOD	6.0	3/5, FLINT DENT	
P7647	34.4%	190	EARLY	MODERATE	✓	✓		GOOD	GOOD	4.8	3/5, FLINT DENT	
P7364	34.3%	210	INTERMEDIATE	FAST	✓	✓	✓	GOOD	VERY GOOD	7.0	2/5, FLINT LIKE	
P7655	34.1%	220	INTERMEDIATE	MODERATE	✓	✓	✓	MODERATE	GOOD	5.5	4/5, DENT	
P7948	33.6%	220	INTERMEDIATE	MODERATE	✓	✓		VERY GOOD	VERY GOOD	7.8	2/5, FLINT LIKE	
P8200	31.7%	230	INTERMEDIATE	FAST	✓	✓	✓	VERY GOOD	GOOD	8.2	2/5, FLINT LIKE	
DS1897B	31.5%	250	LATE	VERY SLOW	✓			GOOD	MODERATE	TBC	2/5, FLINT LIKE	
	PACTS Multi Year	FAO <sup>#</sup> Maturity		Stover Dry-Down	Soil Typ	e Adaption	Guide		Relative	Relative Eyespot		
Hybrid**	Average Silage Dry Matter Content, Samco Sites	Ratings Scale based on PACTS Results	Relative Silage Maturity Description	Approaching Physiogical Maturity	Light	Medium	Heavy	Relative Early Vigour Description	Lodging Resistance	Resistance Rating* (1-9)	Grain Endosperm Texture, Score & Description	
P8153	34.7%	230	LATE	MODERATE	✓	✓		GOOD	VERY GOOD	TBC	5/5, DENT	
P8115	33.7%	230	LATE	SLOW	✓			GOOD	GOOD	TBC	4/5, DENT LIKE	

Where ratings based on a 1 - 9 scale, higher rating indicates character is shown to a high degree 
## Experimental code prior to registration 
\* Rating derived from NIAB Office...

cter is shown to a high degree # Food and Agriculture Organisation; lower number indicates earlier maturity

<sup>\*\*</sup>Available in EU only

<sup>\*</sup> Rating derived from NIAB Official Trials Results and PACTS Trial Scores; TBC = To Be Confirmed



# Maize PACTS Trial Provisional Results 2025







#### **Historical Forage PACTS Trials Control Hybrid Results Summary**

Year	Fresh Weight Yield (Tonnes / Hectare)	Dry Matter (%)	Dry Matter Yield (Tonnes / Hectare)	Starch (%)	Starch Yield Converted to Grain (Tonnes / Hectare at 15% Moisture)	Sugar (%)	Whole Plant Digestibility (%)	Neutral Detergent Fibre (%)	Number of Sites	Number of Less Favourable Sites	Number of Favourable Sites
2025	36.941	40.0	14.762	39.7	8.952	3.1	78.7	36.6	16	8	8
2024	42.760	31.3	13.405	33.7	6.913	2.4	71.8	42.6	23	13	10
2023	43.062	38.3	16.500	36.2	9.149	2.4	75.1	40.9	17	8	9
2022	34.778	38.2	13.400	40.5	8.093	1.4	77.2	35.5	17	8	9
2021	42.295	35.0	17.300	35.3	9.306	2.8	75.2	59.4	15	9	6
2020	45.488	35.7	16.254	30.9	7.692	5.2	67.6	40.6	16	8	8
2019	43.243	39.3	17.000	34.7	9.019	4.5	68.8	41.4	19	9	10
2018	41.295	37.0	14.800	31.5	7.130	3.8	69.6	41.4	14	8	6
2017	48.662	35.8	18.000	32.6	8.975	5.1	70.4	37.9	19	9	10
2016	47.607	35.8	17.043	33.2	8.660	5.6	70.4	40.9	14	8	6
2015	47.603	31.9	15.163	25.0	5.807	9.8	69.5	43.2	15	8	7
2014	47.822	36.2	17.300	34.1	9.022	5.4	68.8	40.5	18	9	9
2013	44.695	35.6	15.906	35.3	8.587	4.0	71.6	38.9	13	6	7
2012	37.966	32.4	12.300	29.4	5.531	4.9	70.1	43.0	12	4	8
2011	48.100	33.1	15.950	31.1	7.586	2.1	70.1	43.6	14	6	8
2010	45.994	33.7	15.500	36.2	8.582	1.4	70.6	41.7	10	3	7
Average	43.644	35.6	15.661	33.7	8.063	4.0	71.6	41.8	16	8	8

NOTE: All trials included in this summary were grown in the open in the UK or Ireland



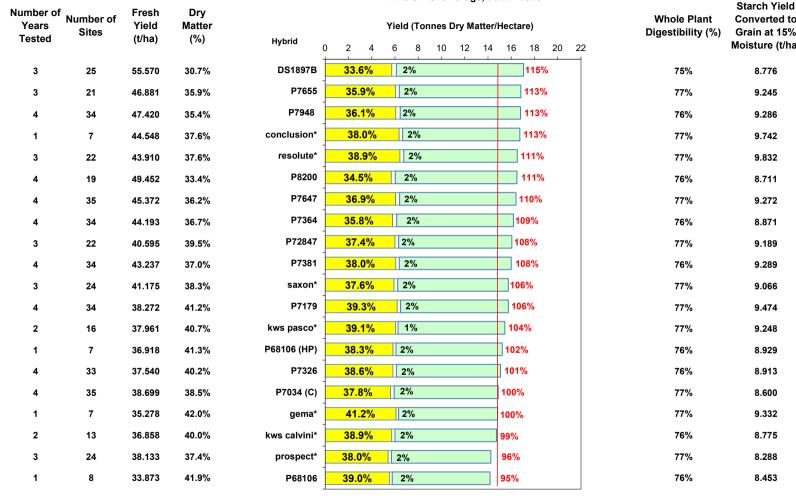
## Multi Year Forage **Summaries Grown in** the Open 2022-2025







#### Favourable PACTS Sites Summary, Whole Plant Forage, 2022 - 2025



**Dry Matter Yield** Converted to Advantage / Grain at 15% Disadvantage Vs Moisture (t/ha) Control (%) 15% 13% 13% 13% 11% 11% 10% 9% 8% 8% 6% 6% 4% 2% 1% 0% 0% -1% -4% -5%

C = Control Hybrid; \* = Competitor Hybrid, HP = High Population

Sugar Yield & %

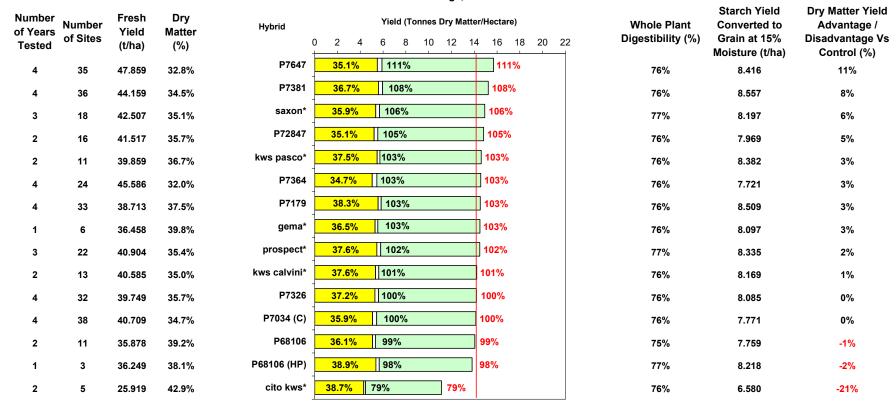
Relative Dry Matter Yield Index (C = 100%)

Starch Yield & %

Stover Yield



#### Less Favourable PACTS Sites Summary, Whole Plant Forage, 2022 - 2025







## Predicted Methane Yields





#### **Methane Gas Yield Predictions from PACTS Trials**

Favourable Sites Grown In The Open  Less Favourable Sites Grown In The Open									Less Favourable Sites Grown Under The Samco System								
			пе Ореп		Less Favourable Sites Grown in The Open					·							
	2	022 - 2025					2	022 - 2025				2014 - 2025					
	Methan	e Yield*					Methan	e Yield*					Methan	e Yield*			
Hybrid	Litres / ha	Litres / kg Dry Matter	Dry Matter %	No. Yrs Tested	No. Sites Tested	Hybrid	Litres / ha	Litres / kg Dry Matter	Dry Matter %	No. Yrs Tested	No. Sites Tested	Hybrid	Litres / ha	Litres / kg Dry Matter	Dry Matter %	No. Yrs Tested	No. Sites Tested
P7655	5,673,763	337	35.9%	3	21	P7647	5,278,291	336	32.8%	4	35	P8153	5,927,532	322	33.7%	4	5
DS1897B	5,665,889	332	30.7%	3	25	P7381	5,091,027	334	34.5%	4	36	P8115	5,893,353	316	34.7%	2	3
conclusion*	5,657,971	338	37.6%	1	7	saxon*	5,025,803	337	35.1%	3	18	P7655	5,781,726	317	41.1%	2	3
resolute*	5,619,317	340	37.6%	3	22	P72847	4,978,234	335	35.7%	2	16	P7647	5,387,361	319	37.2%	3	10
P7948	5,577,775	332	35.4%	4	34	kws pasco*	4,910,381	336	36.7%	2	11	P8201	5,344,886	312	31.4%	9	32
P7647	5,523,287	337	36.2%	4	35	prospect*	4,907,178	338	35.4%	3	22	P7948	5,327,013	317	34.4%	7	22
P8200	5,469,250	332	33.4%	4	19	P7179	4,891,087	336	37.5%	4	33	P8200 (C)	5,282,392	313	31.1%	11	57
P7364	5,416,710	334	36.7%	4	34	P7364	4,875,770	334	32.0%	4	24	P7381	5,086,081	315	37.0%	4	8
P72847	5,402,342	337	39.5%	3	22	gema*	4,854,303	335	39.8%	1	6	P7364	5,047,614	315	35.2%	5	16
P7381	5,341,606	334	37.0%	4	34	kws calvini*	4,763,959	335	35.0%	2	13	P7034	4,956,383	317	37.2%	9	33
saxon*	5,311,256	337	38.3%	3	24	P7326	4,756,288	335	35.7%	4	32	P7326	4,767,307	320	38.4%	11	43
P7179	5,304,013	337	41.2%	4	34	P7034 (C)	4,719,701	334	34.7%	4	38	P7179	4,766,186	321	41.0%	4	11
kws pasco*	5,194,832	336	40.7%	2	16	P68106	4,648,379	331	39.2%	2	11		•			•	
P68106 (HP)	5,073,853	333	41.3%	1	7	P68106 (HP)	4,648,188	337	38.1%	1	3						
P7326	5,038,672	334	40.2%	4	33	cito kws*	3,733,388	335	42.9%	2	5						
gema*	5,001,733	337	42.0%	1	7												

4,974,263

4,936,037

4.814.289

334

335

338

335

38.5%

40.0%

37.4%

41.9%

P7034 (C)

kws calvini\*

prospect\*

P68106

35

13

24

<sup>4,742,564</sup> (C) = Control Hybrid; \* = Competitor Hybrid; HP = High Population

<sup>\*\*\*</sup> Methane yield figures are determined using a calculation based on the Weissbach formula and actual yield and quality results from the UK & Ireland PACTS® Trials. This formula predicts gas output based on the value of the key substrates in the forage prior to fermentation. The calculation of Fermentable Organic Dry Matter, or 'FoTs', is a key part of the formula and the FoTs is determined using quality data obtained from PACTS® trials.



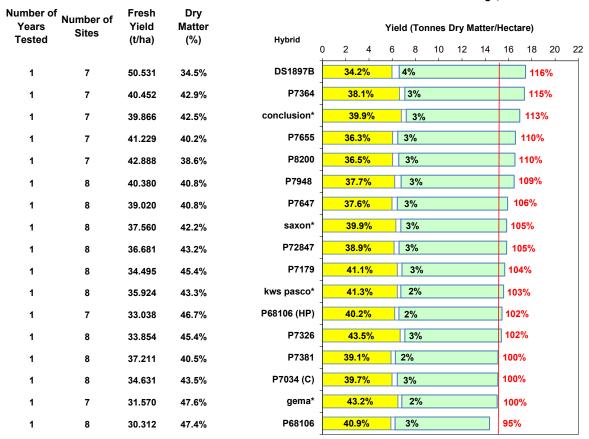
## Single Year Forage Summaries Grown in the Open 2025







#### Favourable PACTS Sites Summary, Whole Plant Forage, 2025



Whole Plant Digestibility (%)	Starch Yield Converted to Grain at 15% Moisture (t/ha)	Dry Matter Yield Advantage / Disadvantage Vs Control (%)				
78%	9.142	16%				
79%	10.114	15%				
80%	10.364	13%				
78%	9.221	10%				
78%	9.237	10%				
78%	9.502	9%				
79%	9.157	6%				
80%	9.661	5%				
79%	9.428	5%				
79%	9.839	4%				
79%	9.839	3%				
78%	9.499	2%				
80%	10.225	2%				
78%	9.019	0%				
79%	9.149	0%				
80%	9.928	0%				
79%	8.992	-5%				

Starch Yield & %

Sugar Yield & %

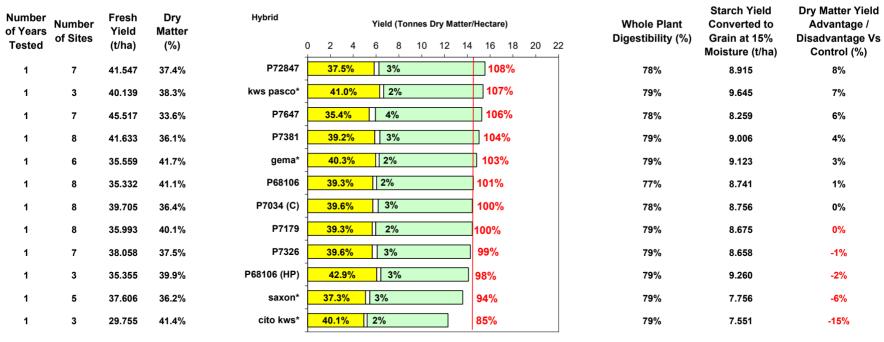
Stover Yield

Relative Dry Matter Yield Index (C = 100%)

C = Control Hybrid; \* = Competitor hybrid, HP = High Population



#### Less Favourable PACTS Sites Summary, Whole Plant Forage, 2025



Starch Yield & % Sugar Yield & %

Stover Yield Relative Dry Matter Yield Index (C = 100%)



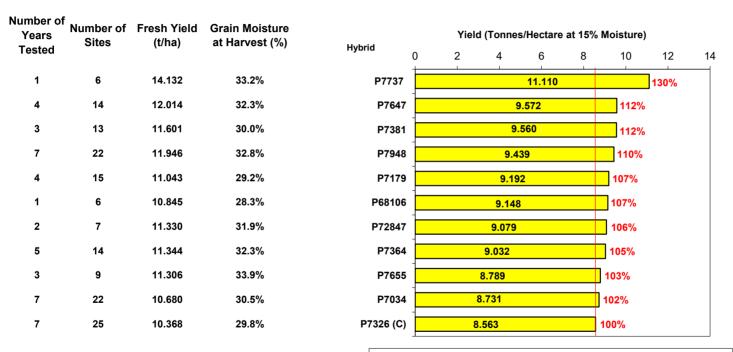
## Multi Year Grain **Summary Grown in** the Open 2019-2025







#### Grain Trials, Grown In The Open, Favourable Sites, England, 2019 - 2025



Yield Advantage / Disadvantage Vs Control (%) 30% 12% 12% 10% 7% 7% 6% 5% 3% 2% 0%

□Grain Yield, Tonnes / Hectare at 15% Moisture ■Relative Yield Index (C = 100%)



#### PACTS GRAIN STRIP TRIAL RESULTS

2019 - 2025

#### HYBRIDS GROWN IN THE OPEN, FAVOURABLE SITES, ENGLAND

HYBRID NAME	No. YEARS	No. Sites	Grain Moisture % at Harvest	Grain Yield, Tonnes / Hectare at 15% Moisture	Relative Yield Index (C = 100%)
P7737	1	6	33.2	11.110	130%
P7647	4	14	32.3	9.572	112%
P7381	3	13	30.0	9.560	112%
P7948	7	22	32.8	9.439	110%
P7179	4	15	29.2	9.192	107%
P68106	1	6	28.3	9.148	107%
P72847	2	7	31.9	9.079	106%
P7364	5	14	32.3	9.032	105%
P7655	3	9	33.9	8.789	103%
P7034	7	22	30.5	8.731	102%
P7326 (C)	7	25	29.8	8.563	100%

C = Control Hybrid



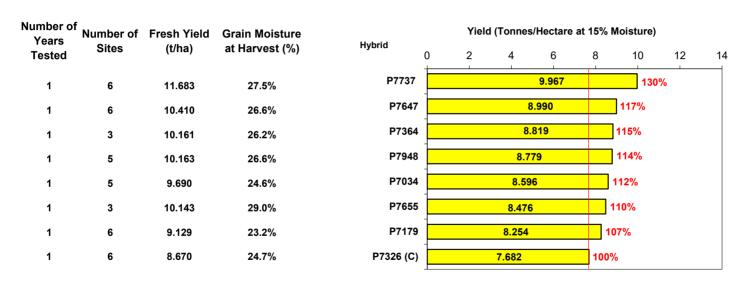
## Single Year Grain **Summary Grown in** the Open

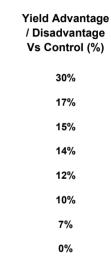






#### Grain Trials, Grown In The Open, Favourable Sites, England, 2025





□ Grain Yield, Tonnes / Hectare at 15% Moisture ■ Relative Yield Index (C = 100%)

C = Control Hybrid



#### PACTS GRAIN STRIP TRIAL RESULTS

#### 2025

#### HYBRIDS GROWN IN THE OPEN, FAVOURABLE SITES, ENGLAND

HYBRID NAME	No. YEARS	No. Sites	Grain Moisture % at Harvest	Grain Yield, Tonnes / Hectare at 15% Moisture	Relative Yield Index (C = 100%)
P7737	1	6	27.5	9.967	130%
P7647	1	6	26.6	8.990	117%
P7364	1	3	26.2	8.819	115%
P7948	1	5	26.6	8.779	114%
P7034	1	5	24.6	8.596	112%
P7655	1	3	29.0	8.476	110%
P7179	1	6	23.2	8.254	107%
P7326 (C)	1	6	24.7	7.682	100%

C = Control Hybrid



