

## **Sonneblomkultivaraanbevelings vir 2015/2016**

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Om finansiële sukses met sonneblomproduksie te verseker, is 'n hoë vlak van doeltreffendheid noodsaaklik. Die seleksie van goed aangepaste kultivars is 'n goedkoop en eenvoudige manier om doeltreffendheid te bevorder en daarvoor is inligting oor die prestasie van kultivars nodig.

Die doel van die nasionale sonneblomkultivarevaluasieproewe is om dié inligting te verskaf, waaruit 'n sinvolle kultivarkeuse gemaak kan word.

Kultivar-aanbevelings in dié dokument spruit voort uit samewerking tussen die LNR-IGG en verskeie saadmaatskappye met finansiële ondersteuning van die Olie- en Proteïensade Ontwikkelingstrust.

Een-en-twintig kultivars, waarvan sewe nuwe inskrywings, is in 21 veldproewe gedurende 2014/2015 geëvalueer. In Tabel 1 word die groeiseisoenlengtes van dié kultivars, asook die gemiddelde opbrengste wat in 2013/2014 en 2014/15 behaal is, aangetoon.

### **Opbrengswaarskynlikheid**

Die opbrengswaarskynlikheid van 'n kultivar is die kans om 'n bogemiddelde opbrengs by 'n bepaalde opbrengspotensiaal te behaal. Indien die opbrengswaarskynlikheid van 'n kultivar by 'n bepaalde opbrengspotensiaal byvoorbeeld 60% is, dui dit op 'n 60% kans om 'n bogemiddelde opbrengs te behaal en 'n 40% kans om ondergemiddeld te presteer.

Tabel 2 toon opbrengswaarskynlikheidswaardes, van die kultivars wat in 2014/2015 geëvalueer is, aan. Weens die jaarlikse toevoeging en onttrekking van kultivars, is 'n meerjarige oesskerheidsevaluasie op slegs 'n beperkte aantal kultivars moontlik. Tabel 3 toon opbrengswaarskynlikheidswaardes, van 14 kultivars wat in 40 proewe gedurende 2013/2014 en 2014/15 geëvalueer is, aan.

Tabel 3 kan gebruik word om 'n kernseleksie van kultivars te maak. Hierdie kern kan aangevul word met kultivars uit Tabelle 1 en 2. Dit is altyd raadsaam om meer as een kultivar te plant en om nuwe kultivars slegs op 'n beperkte skaal in te sluit.

### **Kultivarseleksie uit die opbrengswaarskynlikheidstabel**

Bepaal eerstens die opbrengspotensiaal van 'n land en stel dan 'n opbrengsmikpunt. Die langtermyn

## **Sunflower cultivar recommendations for 2015/2016**

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*Maintaining a high level of efficiency is the basis for the financial success of sunflower production. The selection of well-adapted cultivars is a simple and easy way to foster efficiency for which information on the performance of cultivars is needed.*

*The aim of the sunflower cultivar trials is to generate information from which a sensible selection of cultivars can be made.*

*The cultivar recommendations in this document stem from such an evaluation, made possible by collaboration between the ARC-GCI and several seed companies with financial support from the Oil, Protein Seed Development Trust.*

*Twenty one cultivars, of which seven were new introductions, were evaluated in 21 field trials during 2014/2015. Table 1 shows the growing season lengths of these cultivars as well as their mean seed yields of 2013/2014 and 2014/2015.*

### **Yield probability**

*The yield probability of a cultivar is the chance to get an above average yield at a particular yield potential. For instance, if the yield probability of a cultivar, at a particular yield potential equals 60%, the chance to get a yield above the mean of all cultivars is 60% with a 40% chance of obtaining a yield below the mean.*

*Table 2 shows yield probability values for the cultivars tested in 2014/2015. Since new cultivars are introduced and some removed annually, a multi-season reliability analysis is only possible for a limited number of cultivars. Table 3 shows yield probability values for 14 cultivars that were evaluated in 40 trials during 2013/2014 and 2014/2015.*

*Table 3 can be used to select a core of cultivars. This selection can be expanded with cultivars selected from Tables 1 and 2. It is advisable to grow more than one cultivar and to include new cultivars on a limited scale only*

### **Cultivar selection from the yield probability table**

*Determine the yield potential for a particular land and set a yield target. The long-term mean yield of a particular field is usually a good indicator of the yield*

<p>gemiddelde opbrengs is gewoonlik 'n goeie aanduiding van die opbrengspotensiaal wat dikwels ook as die mikpunt dien. Raadpleeg vervolgens die opbrengswaarskynlikheidstabelle.</p> <p>Kultivars met die hoogste opbrengswaarskynlikhede, wat in die kolom onder 'n bepaalde opbrengspotensiaal getoon word, het die grootste kans om goed in die bepaalde omstandighede te presteer.</p>	<p><i>potential and can therefor serve as yield target. Consult the yield probability tables next.</i></p> <p><i>Cultivars with the highest yield probability values, in the column below a particular yield potential, are those with the best chance to perform well under the particular conditions.</i></p>
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**Tabel 1 Dae tot blom en saadopbrengs van kultivars in 2013/2014 en 2014/2015 geëvalueer**  
**Table 1 Days to flowering and seed yield of cultivars evaluated in 2012/2013 and 2013/2014**

Kultivar/Cultivar	Dae tot 50% blom/Days to 50% flowering	Opbrengs/Yield (t ha <sup>-1</sup> )		
		2013/2014	2014/2015	Gemiddeld/Mean
AGSUN 5264	64	2.27	2.12	2.20
AGSUN 5271	64	2.46	2.19	2.33
AGSUN 5272	67	-	2.20	-
AGSUN 5278	66	2.42	2.23	2.33
AGSUN 5279	64	2.43	2.27	2.35
AGSUN 8251	66	2.50	2.22	2.36
NK ADAGIO CL	64	-	1.94	-
NK TUTTI	62	-	2.06	-
PAN 7031 CL	64	-	2.06	-
PAN 7049	65	2.56	2.33	2.45
PAN 7057	64	2.42	2.24	2.33
PAN 7080	67	2.61	2.37	2.49
PAN 7095 CL	66	2.49	2.32	2.41
PAN 7098	65	2.54	2.47	2.51
PAN 7102 CLP	63	2.35	2.34	2.35
PAN 7117 CL	66	-	2.11	-
PHB 65A25	68	2.28	2.13	2.21
PHB 65A70	64	2.34	2.33	2.34
SY 3970 CL	67	-	2.05	-
SY 4045	63	2.31	1.99	2.15
SY 4065	67	-	2.10	-

**Tabel 2 Die opbrengswaarskynlikheid (%) van kultivars in 2014/15 geëvalueer, by verskillende opbrengspotensiale**

**Table 2 The yield probability (%) of cultivars evaluated in 2014/15 at different yield potentials**

Kultivar/Cultivar	Opbrengspotensiaal/Yield potential (t ha <sup>-1</sup> )					
	1	1.5	2	2.5	3	3.5
AGSUN 5264	48	43	36	31	26	23
AGSUN 5271	<b>64</b>	58	52	46	40	34
AGSUN 5272	59	55	52	48	45	42
AGSUN 5278	27	38	50	<b>63</b>	<b>74</b>	<b>82</b>
AGSUN 5279	52	58	<b>62</b>	<b>67</b>	<b>70</b>	<b>74</b>
AGSUN 8251	39	45	52	58	<b>64</b>	<b>70</b>
NK ADAGIO CL	36	22	11	50	20	10
NK TUTTI	34	32	31	30	29	28
PAN 7031 CL	14	20	27	36	45	56
PAN 7049	<b>65</b>	<b>79</b>	<b>89</b>	<b>95</b>	<b>98</b>	<b>99</b>
PAN 7057	<b>61</b>	<b>62</b>	<b>62</b>	<b>62</b>	<b>62</b>	<b>61</b>
PAN 7080	<b>66</b>	<b>71</b>	<b>75</b>	<b>79</b>	<b>82</b>	<b>84</b>
PAN 7095 CL	<b>78</b>	<b>75</b>	<b>71</b>	<b>67</b>	<b>62</b>	58
PAN 7098	<b>87</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>87</b>
PAN 7102 CLP	<b>68</b>	<b>74</b>	<b>78</b>	<b>83</b>	<b>86</b>	<b>88</b>
PAN 7117 CL	45	41	36	32	28	26
PHB 65A25	18	24	30	40	47	57
PHB 65A70	<b>61</b>	<b>66</b>	<b>71</b>	<b>75</b>	<b>78</b>	<b>81</b>
SY 3970 CL	34	30	25	22	19	17
SY 4045	46	40	34	29	24	21
SY 4065	52	43	33	25	18	13

**Tabel 3 Die opbrengswaarskynlikheid (%) van kultivars in 2013/14 en 2014/15 geëvalueer by verskillende opbrengspotensiale**

**Table 3 The yield probability (%) of cultivars evaluated in 2013/14 and 2014/15 at different yield potentials**

Kultivar/Cultivar	Opbrengspotensiaal/Yield potential (t ha <sup>-1</sup> )					
	1	1.5	2	2.5	3	3.5
Agsun 5264	34	31	27	24	22	20
Agsun 5271	38	41	43	47	48	52
Agsun 5278	27	35	42	52	<b>60</b>	<b>68</b>
Agsun 5279	47	50	54	57	<b>61</b>	<b>64</b>
Agsun 8251	29	38	48	58	<b>68</b>	<b>76</b>
PAN 7049	<b>67</b>	<b>71</b>	<b>74</b>	<b>78</b>	<b>79</b>	<b>82</b>
PAN 7057	53	52	50	48	46	45
PAN 7080	<b>62</b>	<b>69</b>	<b>73</b>	<b>78</b>	<b>81</b>	<b>85</b>
PAN 7098	<b>69</b>	<b>72</b>	<b>75</b>	<b>78</b>	<b>80</b>	<b>81</b>
PAN 7095 CL	<b>64</b>	<b>63</b>	<b>60</b>	59	56	54
PAN 7102 CLP	59	57	52	50	46	43
PHB 65A25	30	29	29	29	29	30
PHB 65A70	58	57	54	52	48	47
SY 4045	55	44	32	23	15	10