15 October 2018

DS Bennett Wheat Description

Background

DS Bennett wheat (breeder’s code ADV 11.9419) was bred in Australia by HRZ wheats and selected by Dow Seeds southern program targeting improved BYDV tolerance and YLS resistance in a milling class, winter wheat. DS Bennett is cross of Drysdale and the breeding line K89.67/TC14.2.

DS Bennett wheat is being commercialised by Seednet for Dow AgroSciences Australia limited.

Key Features

DS Bennett is a long season, white grained wheat with a winter habitat that is adapted to the medium to high rainfall areas of south eastern, and southern Australia where its vernalisation requirements can be met. DS Bennett has an ASW milling classification.

Morphological Description

In the vegetative phase DS Bennett has a vigorous prostrate early growth habit, before producing a tall awnless spike. Straw strength is good with minimal lodging observed to date regardless of grazing activity. Flowering occurs usually 7-10 days later than EGA Wedgetail, and in a consistent window, regardless of planting time and environment.

Irregular Plant Types

During multiplication of DS Bennett wheat, the presence of off types has been noted.

These off types were present in the crops at a level of 0.6%, (~ 5800 in 975 000 plants / Ha). The majority of these off-types are tall early maturing, awnless or tip awned plants. An early maturing awned plant type was also present at low frequencies.

These plant types develop ahead of DS Bennett. In the vegetative stage they are taller than DS Bennett. In earlier quicker maturing regions these off types will be more apparent at this stage in the crop. In the reproductive stage and at maturity they are shorter in stature than DS Bennett and sit below the canopy. They do not impact yield.

<table>
<thead>
<tr>
<th>Description of Irregular Plant Type</th>
<th>Plants / hectare</th>
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<tbody>
<tr>
<td>Early maturing, spring type – awnless and tip awned</td>
<td>4300</td>
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<tr>
<td>Early maturing, spring type – awned</td>
<td>1500</td>
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</tbody>
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Management

While the presence of these off types will not negatively impact yield, growers looking to reduce the frequency of the awnless and awned lines in DS Bennett blocks to be retained for seed, should consider grazing of the crop, use of weed wipers as the early lines begin to elongate and rogueing to reduce their frequency.
DS Bennett wheat observations, South Australia, 2018

Early awned  Early tip awnless  DS Bennett

For more information please contact Dow AgroSciences on 1800 700 096, Seednet on 1300 799 246 or your local Seednet partner.

DS Bennett seed crop at flowering, 2017
Off types in DS Bennett at booting stage, Western Australia, 2018