

## INTRODUCTION

In line with the institutional goals set by the Grain Arbitration Board (**Cámara Arbitral de Cereales de Rosario**), this new report provides the commercial chain new and relevant information. It is a precise description of the bread wheat quality in this 2017/18 growing season. It is based on samples from planted fields traded in our area of influence.

Data come from results of the samples tested in the Board of Trade Laboratories (**Complejo de Laboratorios de la BCR**) from December 1, 2017 to January 27, 2018.

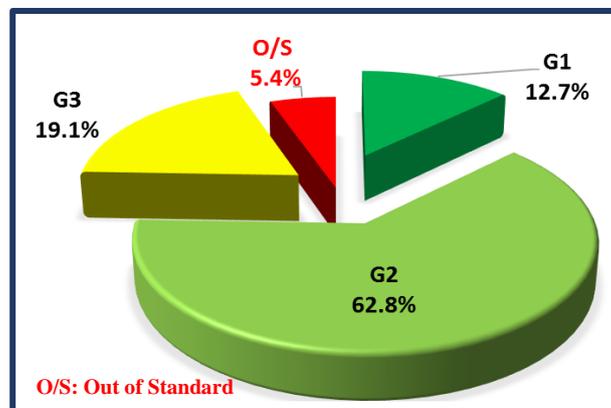
## DESCRIPTIVE STATISTICS

Considering the analytical parameters for **COMMERCIAL QUALITY**, the following results were obtained from a total volume of approximately 1,770,000 tons.

Parameters Statistics	Protein [% B13.5% H]	Protein [% dry basis]	Test weight [Kg/Hl]	White belly grains [%]	Damaged grains [%]
<b>Average</b>	<b>10.0</b>	<b>11.6</b>	<b>79.4</b>	<b>8.4</b>	<b>0.3</b>
<b>Minimum</b>	<b>6.8</b>	<b>7.9</b>	<b>57.8</b>	<b>0.0</b>	<b>0.0</b>
<b>Maximum</b>	<b>17.7</b>	<b>20.5</b>	<b>89.4</b>	<b>95.8</b>	<b>44.6</b>

**94.2 % of damaged grains and 81.6% of white belly grains correspond to Grade I.**

Grade distribution in all analyzed samples is as follows:





Considering the bread quality parameters and based on the **723,000 tons** analyzed, the results were as follows:

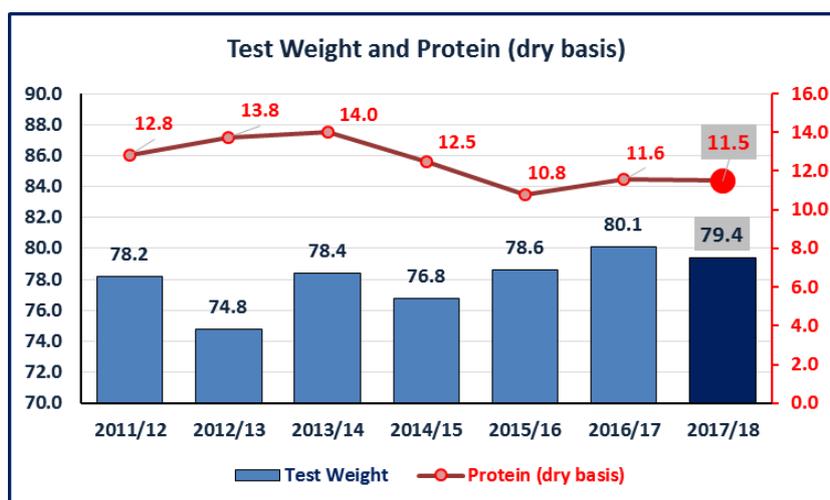
Parameters Statistics	Falling Number [seg]	Humid gluten [% B14% H]	Stability [min]	W [10 <sup>-4</sup> Joule]
<b>Average</b>	<b>394</b>	<b>25.8</b>	<b>12.7</b>	<b>238</b>
<b>Minimum</b>	<b>274</b>	<b>12.0</b>	<b>1.7</b>	<b>157</b>
<b>Maximum</b>	<b>581</b>	<b>40.9</b>	<b>58.3</b>	<b>383</b>

**Almost 5,2% of the humid gluten determinations were outside specifications** as defined in Section 12, Secretary of Agriculture, Livestock, Fishing and Food (SAGPyA) Resolution 1262/04, Standard XX that says: "Wheat with a gluten content unable to bind during mixing or washing will be considered off-grade..."

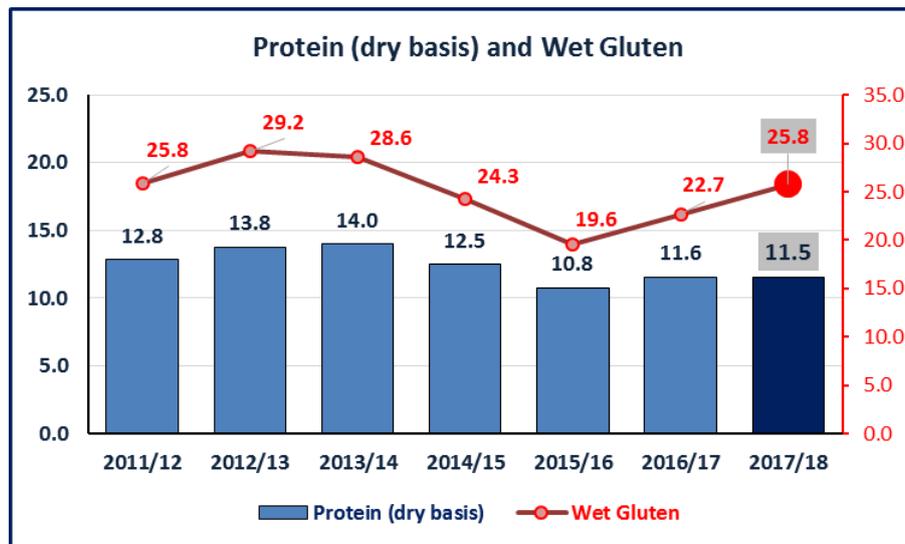
### HISTORICAL EVOLUTION

Below, a graphic comparison of estimated average values for this growing season, with values corresponding to wheat area II North, as surveyed by this Arbitration Chamber.

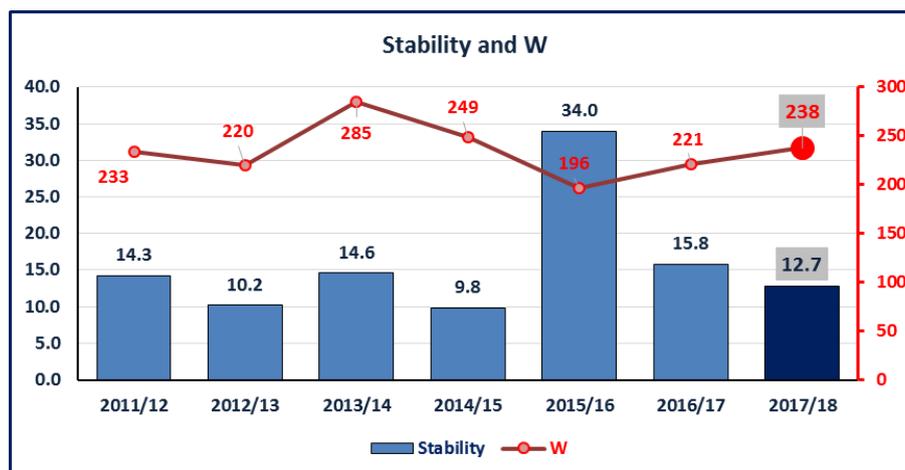
The graph shows that test weight and protein content (expressed in dry basis) relationship is clearly comparable despite the brief decline in test weight suffered in the last season.



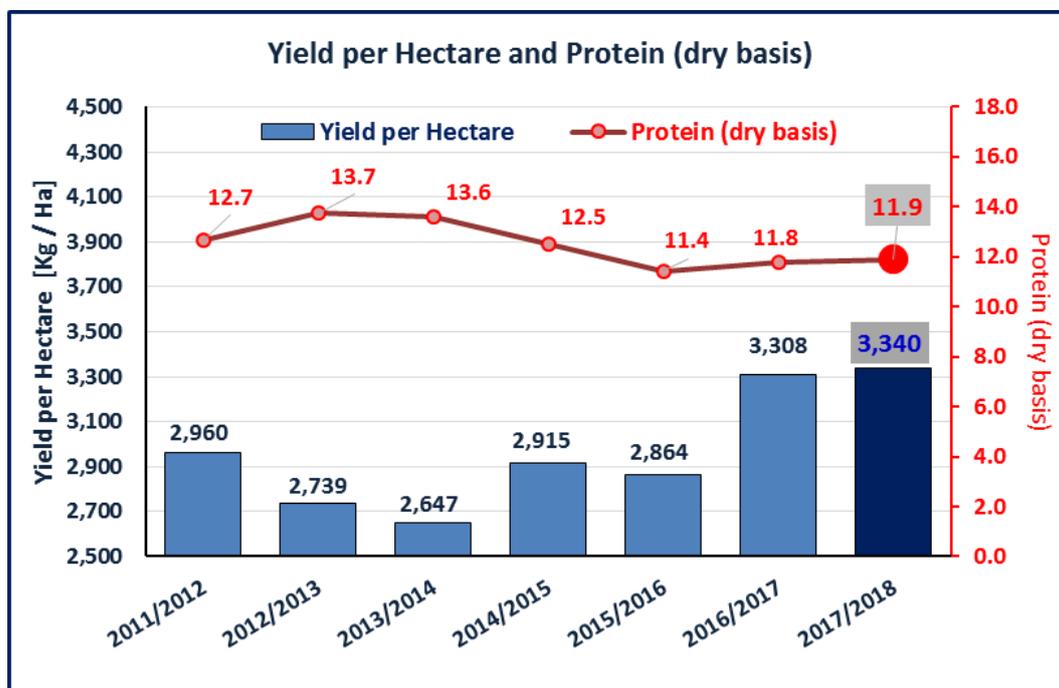
This other graph shows an increase in humid gluten content despite the fact that protein values are similar to the previous season. **Current gluten value is the highest of the last four seasons.**



Parameters that characterize rheology are within good quality values for bread wheat.



Below, nationwide yields per hectare are correlated to protein content values. Source: Trigo Argentino, Ministerio de Agroindustria, Guía Estratégica del Agro (GEA) issued by the Rosario Board of Trade and Relevamiento de Trigo Pan central area carried out by the Arbitration Chambers of Cordoba, Entre Rios, Rosario and Santa Fe.



The relationship between yield and protein content for 2016/17 and 2017/18 seasons is compared to previous seasons. There is a relative increase of about 18% in yields and a decline in protein content of about 7.5%.

#### **USE OF DATA AS PREDICTIVE VARIABLE**

After analyzing the data from this current season and after comparing them with historical data for Subregion II North, they are clearly congruent with results of the following parameters:

