

## PRODUCTION SYSTEMS

GK 02/01, 02/02, 02/03 :

NATIONAL WHEAT CULTIVAR EVALUATION PROGRAMMES  
PROGRESS REPORT APRIL 2010 – MARCH 2011

### Summary

The results of the National Cultivar Evaluation Programme were presented to the Cultivar Evaluation Workgroup, where all role players in the Small Grain Industry are represented, on 9 February 2011. The Committee accepted the project reports and the Institute received the mandate to conduct the National Cultivar Evaluation Programme in all production regions during the 2011 season. The regions where the field trials are executed are the winter rainfall region (dry land), summer rainfall region (dry land) and in the northern irrigation areas. A total of 105 field trials were planted in the 2010 season and a total of 54 cultivars were evaluated in the different regions. The results of the Cultivar Evaluation Programme were updated, together with guidelines on all production practices, to be published in the four Production Guidelines Booklets (Afrikaans and English for the Southern as well as Northern production areas). These publications were finalised and mailed to all small grain producers in South Africa

### **Winter rainfall area (dryland)**

**Project number:** GK 02/01  
**Project title:** Wheat cultivar evaluation in the winter rainfall region  
**Duration:** Ongoing  
**Status:** Continuation of existing project  
**Project leader:** Willem Kilian

### **Swartland**

The average yield of the combined trials (conventional as well as conservation tillage) in the Swartland, was 3.11 ton/ha. The cultivars that performed best and yielded above the average, were in descending order SST 88, PAN 3408, SST 087, PAN 3434 and SST 056. The average hectolitre mass of the combined trials in the Swartland was 79.55 kg/hl. This was 0.50 kg/hl higher than the average of 79.05 kg/hl that was obtained during 2009. The average protein content for all the trials planted with the conventional planter in the Swartland was 12.00%. This was lower than the average protein content of 13.43% which was obtained in the trials planted with the DBS planter. No problems with falling numbers were experienced in any of the trials. The average falling number in the combined analysis was 341 s.

### **Rûens**

The average yield of the combined trials (conventional planting and conservation tillage) in the Rûens was 2.63 ton/ha. This was lower than the average yield during the previous season (3.27 ton/ha). The lower yields were due to less favourable conditions after planting and at the grain filling period. Heavy rainfall in some areas during harvesting time also resulted in lower yields. The hectolitre mass of the combined trials was slightly higher than in the previous year, with an average of 76.88 kg/hl. Protein content showed an average of 12.26%. High falling numbers, with an average of 335 seconds was recorded in the 2010 season.