## RR-04

Soybean production in Brazil

Silmar Teichert Peske, Federal University of Pelotas, Rio Grande do Sol, Brazil Brazil cultivates 34 million hectares of soybean, being roughly 50% of the cultivated area of all crops in the country. The yield has increased from 2.4t/ha, in the beginning of the century, to 3.2 now in the crop year of 2016/17. This has to do with the hard work of the plant breeding programs, which release for adoption more than 15 cultivars per year. In terms of GM soybean, more than 90% of the area is cultivated with RR or RR2Bt soybean.

The seed usage rate by the farmer is 65%, where more than 200 seed producers do act, following four laws, plant variety protection (PVP), seed production and commercialization, biosafety and patent, respectively. The farmer pays a royalty for the variety and a technological fee for the trait. The seed trade is over one billion dollar per year, where two recent trends deserve mentioning, being the industrial seed treatment, with close to 40% adoption, and seed commercialization with a seed vigor index. In terms of agronomics, it is pointed out that: 1) The main disease is the Asian Rust that, on average, four fungicide application are necessary to control it; 2) The cycle of the soybean cultivars are mainly of the early type, in order to allow a second crop that can be corn or cotton; and 3) Phosphorous is the main fertilizer used.

Most of the soybean is still exported as grain, however the internal usage is increasing mainly for fuel oil and nutrition. In this aspect of exporting, a huge effort is being done to improve the roads (Brazil has long distances to be covered) and the port facilities. Some has been done.