

ABSTRACTS

SESSION: RESEARCH AND DEVELOPMENT WITH GRAINS, CEREALS AND FOOD
AT THE BRAZILIAN AGRICULTURAL RESEARCH CORPORATION - EMBRAPA

Chair

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WHEAT: TECHNOLOGICAL QUALITY AND SANITARY

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Wheat is one of the major agricultural commodities and one of the most important Brazilian raw food, considering the consumption (more than ten million tons per year) and the financial transactions (about one billion and four hundred million, only in agriculture). Moreover, wheat is a major constituent of many by-products. In Brazil, wheat imports represent, on average, almost 50% of the consumption. In addition to price, quality is extremely important for both the internally produced wheat as well as the imported one. Each sector involved in the agricultural and industrial complex of wheat has a different definition of quality. In this context, the purpose of this lecture is to detail two different approaches of the wheat quality: technological and sanitary. From a technological point of view, each wheat derived product requires specific physical, chemical and rheological parameters in order to obtain the maximum yield and to reach the consumer's demand in the final products. The sanitary aspect involves all factors related to food safety of the wheat being this demand relatively recent in Brazil and still not well known in some industries. For wheat, the presence of contaminants, like pesticide residues and mycotoxins, are visually imperceptible in the final product increasing the challenge for safe food production. In order to meet the requirements of Brazilian laws concerning the commercial classification and the limits of mycotoxins and pesticide residues, integrated research actions are needed to monitoring, managing and controlling all stages of the wheat production chain. Added to this, due to the interannual climate variability and the characteristics of the different wheat homogeneous adaptation regions, Embrapa invests in research in a systematic way, aiming to reduce the impact of non-favorable environment in the wheat farming and to contribute to the production and marketing of safe food.