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FROM SEED TO PASTA & BEYOND

A Sustainable Durum Wheat Chain for Food Security and Healthy Lives

PASTA QUALITY FACES THE EU'S SUSTAINABLE AGRICULTURE CHALLENGE

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Durum wheat is a traditional cereal crop of the Mediterranean countries. Compared to common wheat its distinguishing feature is almost exclusively used for human consumption in the form of semolina, pasta and couscous. In this context, demands of the durum wheat processing industries are of utmost importance and drive the agricultural practices. Industries target on fully vitreous grains of yellow-amber colour with high protein content. For the farmers, reaching durum grain quality standards mainly rely on appropriate crop management techniques and especially on fertilization inputs. Durum wheat production is thus demanding and potentially could have high environmental impact in case of nitrogen leaching from soils. Submitted to several abiotic stresses, durum yield is in average low to medium compared to other crops. Until a couple of years ago, this was not a problem for the farmers from south of France. Indeed in the years 2000's durum was marketed at a high price and farmers especially those from the south of France received financial supports from the EU's common agricultural policy (CAP). Compared to common wheat, the market price was so high that durum growing increase in central France, traditionally more focused on common wheat production. Because of milder climatic conditions higher yield were achieved compared to south France, while grain quality was secured by increasing nitrogen supplies. Since that time the landscape of durum production in France has profoundly changed. Starting from 2003 the automatic price support from CAP was cancelled and since 2008 emphasis has been placed on environmental concerns with an increasingly regulated use of nitrogen fertilizers and pesticides. A direct consequence of these changes has been the progressive decline in durum-wheat growing lands by 20% in EU-27 over the past 10 years. In France between 2012 and 2014, the durum wheat land occupancy dropped by 33% while production fell by 40%. In order to reverse this trend before it threatened the economic position the French durum wheat sector, French public agronomic research institutes launched the "Plateforme Blé Dur" a brainstorming group gathering all the actors of the durum sector. During this presentation, the key strategic orientations adopted by the "Plateforme Blé Dur" and the recently launched research program "Dur-Dur" funded by the French National Research Agency in 2014 will be detailed. The objective of Dur-Dur is to deliver sustainable and innovative agronomic and technological solutions towards securing the French durum wheat sector, from the farmers to the end-users.