

International Conference

FROM SEED TO PASTA III

A SUSTAINABLE DURUM WHEAT CHAIN FOR FOOD SECURITY AND HEALTHY LIVES



FSTP3

Bologna - Italy, 19-21 September 2018

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PROGRAM



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P.8.54

FROM KAZAKHSTAN BASED ON MICROSATELLITE MARKERS

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Durum wheat (*Triticum durum* Desf.) is an important crop both in the world and in Kazakhstan. Effective breeding strategies require knowledge of the genetic diversity level of local cultivars. Polymorphism of the 92 durum accessions, including 29 local accessions, was analyzed using 10 microsatellite markers. The average polymorphic information content (PIC) values for studied DNA markers was 0.3658 and ranged from 0.1267 in Xgwm219 to 0.5457 in Xgwm247. The average genetic diversity indices of Shannon and Nei were equal to 0.7174, 0.4243, respectively. The level of genetic diversity of local accessions was relatively high in comparison to the rest of the studied samples. The genetic distance between cultivars was calculated. Also, with the help of microsatellite markers, a cluster analysis of the studied cultivars was conducted. Polymorphic markers were selected for future studies on the durum genetic diversity. The obtained information will be used in local breeding programs.

ABSTRACT

SESSION 6.

ENHANCING DURUM QUALITY AND HEALTHINESS

- P.6.45 **Gluten forming capacity of Argentinean durum wheat genotypes (*Triticum durum* Desf) is related to cultivar's intrinsic gluten strength and protein levels**
Marta Miravalles (*University of Sur, Argentina*)
- P.6.46 **Development of functional durum wheat pasta derived by waste material from the brewing process**
Laura Gazza (*CREA, Italy*)
- P.6.47 **Deoxynivalenol content in less refined milling fractions of durum wheat employing an innovative technology**
Alessandro Cammerata (*CREA, Italy*)
- P.6.48 **The effect of acorn (*Quercus ilex*) flour addition to pasta quality**
Youkabed Zarroug (*ESIAT, Tunisia*)
- P.6.49 **The organic treatments on commodities and environment: the efficacy of the Natural Pyrethrum**
Stefano Cherubin (*Newpharm, Italy*)

SESSION 7.

INNOVATION IN THE DURUM WHEAT-PASTA CHAIN

- P.7.50 **Characterization of the seed proteome of *Triticum durum* varieties selected for their different immunogenic potential**
Sara Graziano (*University of Parma, Italy*)
- P.7.51 **Effects of *Opuntia ficus-indica* cladodes in functional bread made with Sicilian durum wheat landraces**
Rosaria Bognanni (*CNR, Italy*)
- P.7.52 **Phenotyping of old and modern durum wheat genotypes for gliadin composition in relation to health quality**
Michele Andrea De Santis (*University of Foggia, Italy*)

SESSION 8.

OPPORTUNITIES AND PERSPECTIVES IN WHEAT RESEARCH

- P.8.53 ***Ae. tauschii* introgression into durum wheat**
Manel Othmeni (*University of Nottingham, UK*)
- P.8.54 **From Kazakhstan based on microsatellite markers**
Shynar Anuarbek (*University of Kazakh, Kazakhstan*)
- P.8.55 **From plant breeding to industrial process: Integrated data management based on a Research Resource Planning**
Rudy Mezino (*Doriane, France*)