

## Supplementary Materials: Participatory Farmers-Weighted Selection (PWS) Indices to Raise Adoption of Durum Cultivars

**Supplementary Table S1.** Grouping of breeders' open-end responses into five homogeneous categories

<b>Broad criteria</b>	<b>Descriptive text used by respondents</b>
Yield potential	All responses mentioning “yield” with qualifiers such as “yield potential”
Yield stability	All responses indicating “stability”, “G × E”, or “wide adaptation”
Biotic resistance	All responses indicating diseases or insects
Abiotic resistance	All responses with the terms “heat” and “drought” (the two most frequent), but also “salinity” and “frost”
Industrial quality	All responses with the terms: “bread making”, “yellow pigment”, “semolina yield”, “gluten strength”, “extensibility”, “transformation”, “food quality”, and “end-user”.

**Supplementary Table S2.** Grouping of farmers' preferences into six homogeneous categories

<b>Farmers surveyed traits</b>	<b>Broad criteria</b>
Grain yield	Yield potential
Tillering ability	
Grain yield stability	Yield stability
Shattering tolerance	
Guaranteed minimum yield	
Disease tolerance	Biotic resistance
Insect tolerance	
Drought tolerance	Abiotic resistance
Frost tolerance	
Water-logging tolerance	
Early maturity	Industrial quality
Grain color	
Grain size	
Marketability (demand)	
Better grain price (local currency/unit)	
Flour making quality	
Baking quality	
Bread making quality	
Taste for different dishes	Household use
Other food making quality	
Grain shape	
Straw yield	
Palatability of straw	

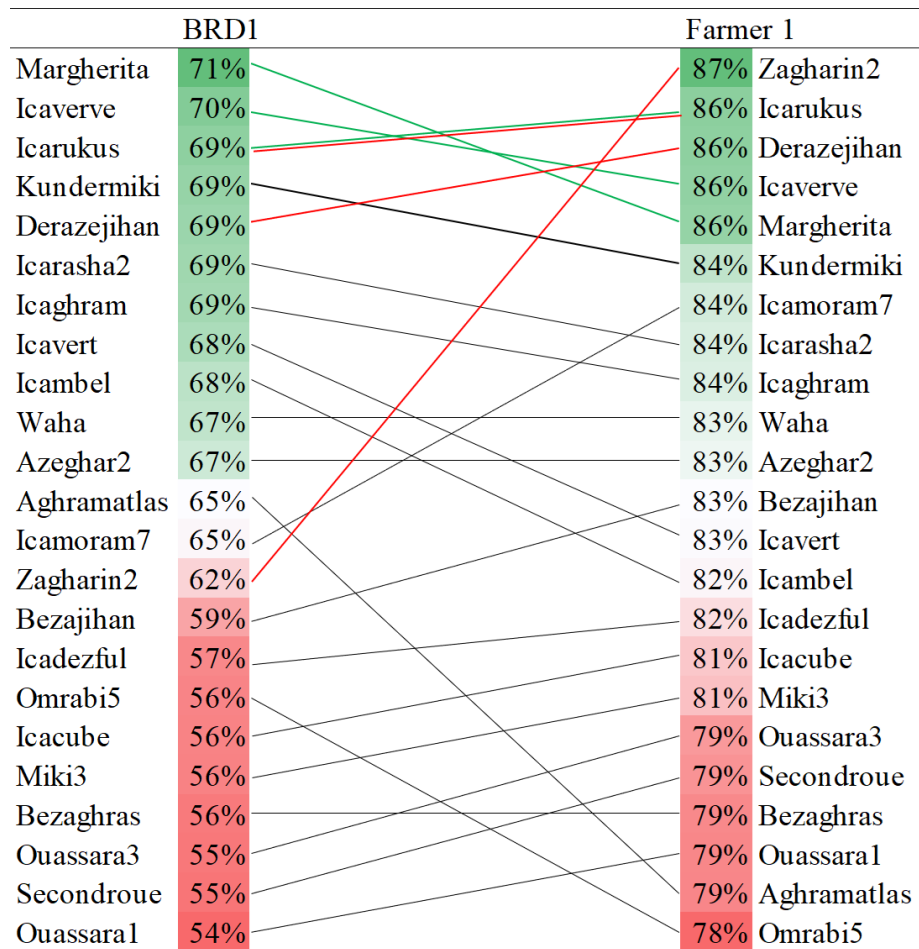
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Storability  
 Ease of threshing  
 Labor demand  
 Less input demand  
 Cooking time

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**Supplementary Table S3.** Estimated performances of 23 durum wheat candidate cultivars by selection criteria converted from field data into ratio to the best genotype (0–100%)

<b>Line ID</b>	<b>Yield potential</b>	<b>Yield stability</b>	<b>Biotic stresses</b>	<b>Abiotic stresses</b>	<b>Industrial quality</b>	<b>Household use</b>
Aghramatlas	94%	65%	33%	73%	85%	84%
Azeghar2	94%	79%	33%	78%	87%	96%
Bezaghra	93%	78%	0%	79%	81%	87%
Bezajihan	98%	83%	0%	82%	93%	85%
Derazejihan	99%	89%	33%	81%	83%	94%
Icacube	95%	88%	0%	82%	68%	92%
Icadezful	96%	84%	0%	79%	86%	94%
Icaghram	98%	79%	33%	80%	87%	84%
Icambel	95%	74%	33%	80%	83%	88%
Icamoram7	97%	78%	17%	85%	85%	88%
Icarasha2	95%	71%	33%	85%	73%	94%
Icarukus	95%	89%	33%	86%	78%	96%
Icavert	95%	64%	33%	80%	92%	90%
Icaverve	99%	80%	33%	85%	76%	93%
Kundermiki	98%	82%	33%	81%	89%	85%
Margherita	98%	78%	33%	89%	77%	85%
Miki3	97%	74%	0%	77%	86%	95%
Omrabi5	91%	58%	0%	81%	88%	87%
Ouassara1	97%	77%	0%	73%	80%	92%
Ouassara3	98%	73%	0%	76%	78%	90%
Secondroue	94%	82%	0%	79%	72%	90%
Waha	97%	82%	33%	78%	84%	89%
Zagharin2	97%	89%	0%	94%	85%	96%



**Supplementary Figure S1.** Distribution of matching preference for 23 candidate cultivars as assessed by selection index for breeders ‘class 1 (BRD1) composed of North African breeders and the largest Moroccan farmers (Farm) class. Percentage of match is presented. The lines join graphically the position of the elite lines in the two different classes sorted by preference. Green lines were used to highlight the top 3 lines for breeders and the red lines for farmers.