Table S1. Correlation among root traits measured in the well-watered and water stress environments for the nine genotypes. Within regime comparisons indicated by light shade with high correlations in bold font. High correlations between regimes indicated by darker shading.



Table S2. Yield of two topcross hybrids on seed parent Civarex 06\_05 in relation to the local check among seven farmers in the Koro cooperative, 2016. I think these data re wrong.

|  |  |  |  |
| --- | --- | --- | --- |
| Farmer name | Yield Toroniou TCH  (t ha-1) | Yield Maiwa TCH  (t ha-1) | Yield local check  (t ha-1) |
| Bourama Togo | 2.40 | 1.60 | 1.40 |
| Djibril Bamadio | 2.60 | 1.40 | 1.52 |
| El Oumar Togo | 2.70 | 1.40 | 1.50 |
| Madou Traore | 2.22 | 1.60 | 1.20 |
| Malick Togo | 2.10 | 1.01 | 1.36 |
| Mamadou Togo | 2.80 | 1.80 | 1.50 |
| Oumar Togo | 2.20 | 2.00 | 1.40 |
| Mean | 2.43 | 1.54 | 1.41 |

Significance of differences between entries = P<0.001

Differences between farmers non-significant.

Table S3. Farmers’ perceptions, superior to local check (+), no difference (=), worse (-), no data (n.d.) of two topcross hybrids on seed parent Civarex 06\_05 among seven farmers in the Koro cooperative, 2016.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Farmer name | Yield Toroniou TCH | Yield MaiwaTCH | Downy mildew Toroniou TCH | Downy mildew Maiwa TCH | Earliness Toroniou TCH | Earliness Maiwa TCH | Overall preference  Toronio TCH | Overall preference Maiwa TCH |
| Bourama Togo | + | + | + | n.d. | + | n.d. | + | = |
| Djibril Bamadio | + | - | + | n.d. | + | + | + | + |
| El Oumar Togo | + | + | + | n.d. | + | n.d. | + | + |
| Madou Traore | + | + | + | n.d. | + | + | + | = |
| Malick Togo | - | - | = | + | + | + | + | - |
| Mamadou Togo | - | - | + | + | + | + | + | - |
| Oumar Togo | + | = | + | n.d. | + | = | + | n.d. |