



**Supplementary electronic Figure S1.** PCA of chemical characteristics of sorghum flours and the physical, chemical and technological characteristics of their respective cooked pastas. Variables of cooked pastas are in bold. Variables are: PR - protein content; LI - lipid content; SOF – soluble fibers; INF – insoluble fibers; ASH - ashes; TPC - total phenolic contents; TAN - total condensed tannins; DPPH- antioxidant activity EC50; FRAP - antioxidant activity; RS - resistant starch; f-RS: resistant starch in the flour; AM - amylose content; f- AM: Amylose in the flour; SS - soluble starch; f- SS – Soluble starch in the flour; MOI - moisture; f- MOI: moisture in the flour; WSH - work of shear; MCF - maximum cutting force; WAI - water absorption index; VI - volume increase; SSL- soluble solids losses.