

OGA (FERMENTED HUMAN URINE) FERTILIZER

An Auto-Innovation among Women Farmers in Niger

SAHELIAN PEARL MILLET PRODUCTION is often associated with low panicle yield due to poor soil chemical fertility. Options such as NPK micro-dosing, seed priming and coating can increase pearl millet panicle yield. However, these options are barely available to the Sahelian women farmers in particular due to high cost and lack of skills.

Oga (fermented human urine) was developed as an innovation to ameliorate soil chemical fertility and, in turn, increase pearl millet panicle yield. In large-N trials at women's fields in Maradi, Tillabery, and Dosso region of Niger (2014–2018), *Oga* (diluted at 1:1 ratio with water) was applied twice (15 and 30 days after sowing) as a fertilizer innovation at the rate of 0.2 liter per planting pocket.



RESULTS

- » A consistent panicle yield increase of +30%, between +200 to +300kg per hectare in general.
- » Increased panicle yield in different soil types, social classes (young, elderly with help and elderly without help) and villages.

Oga is effective, economical and affordable, socially accepted, simple to apply, and sustainable. *Oga* improves soil chemical fertility. Since sorghum and pearl millet are the two major staple crops produced in the Sahel, transferring the *Oga* pearl millet innovation to sorghum might increase yield and benefit the Sahelian women producers.



Sanitized human urine (*Oga*) as a fertilizer auto-innovation from women farmers in Niger
SpringerLink

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