



RTMK

GREENSEEDER HAND PLANTER

1 example of the 2014 prototype hand planter was received at RTMK end of November for testing. Trial was done beginning of December after receiving the metal tip missing part. Location: maïs field from Nkinke, Kashobwe, Katanga. The trial was done under actual farm conditions of mechanization and use of labour.



Location of the farm, and view of the land. The terrain is sandy and flat, there is no soil erosion



What we do in practise: a furrow is opened with help of a maïs planter (the planter is not dropping seeds).



What we do in practice: 1 md is dropping the seed followed by 1 md to cover the seed with his feed or 2mds/1.000m line, 4 lines/day.





The dark metal tip (on the left) had the perforations not in front of the housing (on the right) perforation. It was necessary to adjust the two in order to allow inserting the pin.



Green seeds (in front) used for this 2014 planting season: the size of the seed is too big for the *Greenseeder Hand Planter*. The *OSU Hand Planter* is not dropping big size seeds. Pink seeds (in the back) used for last 2013 planting season: only small size seeds are dropped by the hand planter.



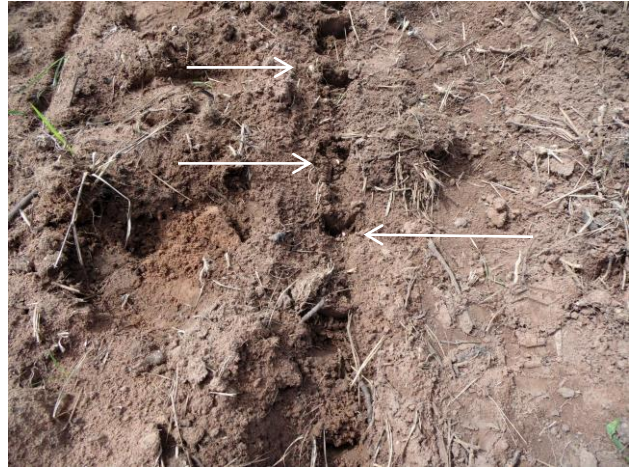
Movement 1: introduce the hand planter with an inclination into the soil. The depth is even due the end tip.



Movement 2: push the hand planter in front of you while pressing and releasing the spring (which movement will drop the seed).



Movement 3: pull the hand planter out of the soil. This movement is supposed to cover the seed



Observations:

- Uneven dropping
- Uneven & partial covering of the seeds



CONCLUSION:

In our environment and actual farm mechanization the *Greenseeder Hand Planter* could reduce the use of labor by 50%. Instead of 2mds (1md for dropping the seed + 1md to cover the seed) we could only use 1md doing both operations assuming that:

1. For each movement to drop the seed there is effectively a seed dropped
2. The seed dropped is covered properly

Kashobwe

7/12/2014