Maize-Legume cropping system under CA for western Ethiopia

Research results showed soybean-maize rotation and maize-soybean or common bean intercropping under CA improved crop productivity and soil properties in the high potential sub-humid western agro-ecology of Ethiopia.

CA Crop Management Information

1. Land Preparation:

   For minimum tillage, apply (spray) glyphosate (round up) uniformly after weeds are fully covered the land at a rate of 2.5 to 3lit/ha depending on weed density and type. All emerged vegetation will be killed within 10-14 days

2. Planting

   ♦ Make planting rows either using oxen plough or hand hoes (minimum tillage)
3. Fertilizer application
- NPS of 150 kg ha\(^{-1}\) will be applied to maize at planting and 200 kg ha\(^{-1}\) UREA in split application (half UREA at knee height and the rest half at maize flowering). Only 100 kg ha\(^{-1}\) NPS will be applied to the legumes for sole production. No fertilizer is applied to intercropped legumes.

4. Weeding
- First weeding should be done 15-18 days after both crops emergence to minimize early weed infestation in CA.
- Subsequent weeding should be done based on weed infestation densities.
- Two to three times weeding may be required for the crops.
- Early weeding is most required for soybean planted sole for rotation as the legume is more sensitive to early weed infestations.