Africa RISING in the Ethiopian Highlands

Enhancing food and nutritional security through introducing high value fruit trees in the highlands of Ethiopia

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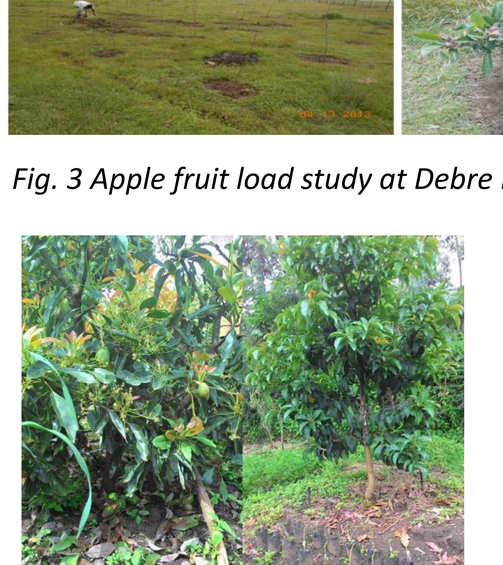
Key research activities

- Identifying existing Community knowledge Groups (CKG) and institutions as a basis to establish Innovation Platform
- Introducing high value trees (HVT) 5 varieties of **Avocado** (*Percia america*), **Apple** (*Malus domestica* Borkh), 5 varieties of **Walnut** (Fig 4)
- Testing and identifying their suitability through **on farm, experimental, laboratory trial, socio economic survey,** and **capacity building**
- Effect of management practices, (watering regime, mulching, fruit thinning, root stock compatibility) on survival, growth, yield and fruit quality

Key research findings

- Survival rate ranges (between 90 and 100%) for avocado and (between 75 and 96%) for apple across sites (Fig 3);
- Promising high value species/varieties and management interventions identified
- Crop load of 2 fruits per spur resulted in best yield and marketable quality (Melke et al. 2016)
- Almost all Africa RISING SI technologies had positive effects on yield, its value and sold quantity and its policy implications are dawn (Hagos et al in review)
- Capacity development: 300 farmers, 1 PhD and 4 MSc student trained
- **Nursery site established** (at Sinana) (Poster no. 3)
- 1 journal article published one under review and one in pre.5 reports and 3 briefs published etc.



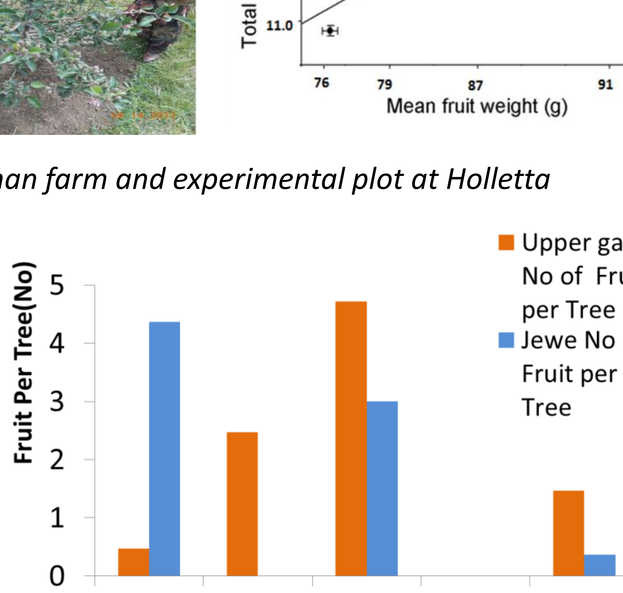


Fig. 2 less than two year avocado in Jawe (Hass) and apple intercropping with onion

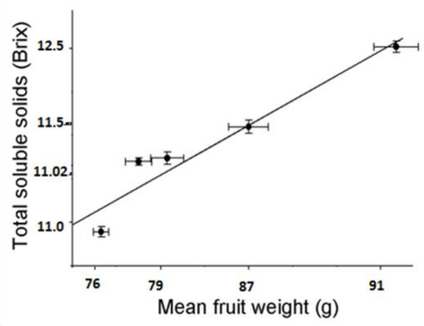
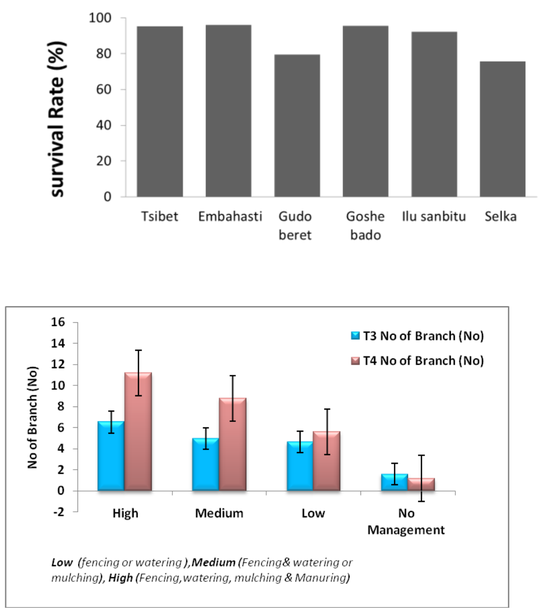
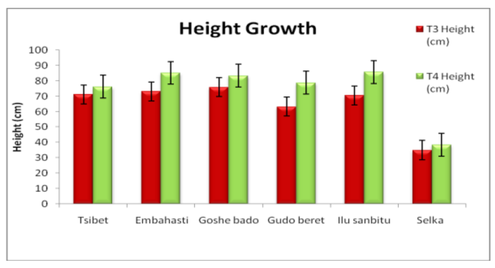


Fig. 3 Apple fruit load study at Debre Birhan farm and experimental plot at Holletta

Fig. 4 periodic three month data collection , Apple fruiting in Sinnana and Avocado in Ganna

Fig. 5 Eighty percent of the five improved variety of Walnut (Xi xiang, Dx pao, Yana zx, Yun xin, Niang Qing), imported from China have survived and are performing well.





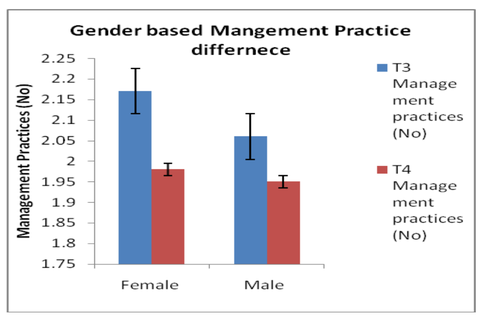


Fig. 1 Apple sapling survival rate % , growth and effect of management practices across sites

Core partners

We thank farmers and local partners in Africa RISING sites for their support