

## Challenges in introducing *Hippophae rhamnoides* L. for sustainable growing in Ethiopia

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Common seabuckthorn (*Hippophae rhamnoides* L.) is not native for Africa, but it could be a promising new fruit crop for most Africa in general, and Ethiopia in particular. Identifying suitable cultivars is necessary to introduce to Ethiopia due to its proven applications in nutrition, health, socioeconomic, and environmental aspects. Our interest to sustainably grow seabuckthorn in the east African country began a long time ago. However, the lack of suitable cultivars, training, and financial support to run it has been the bottleneck. The objective of our collaborative research is to identify and test suitable seabuckthorn cultivars to grow under various ecological conditions of Ethiopia. During the Potsdam International Seabuckthorn Association (ISA) meeting in Germany (2013), a report on a preliminary test results obtained from



**Figure 1** Low seed germination, rootless seedlings, and dieback are among the important challenges facing our infant program in South Ethiopia (Photo: W. Letchamo, 2016).

seed grown plants originating from Novosibirsk was presented. In the present report we discuss how the surviving plants developed further to maturity, and characteristic agronomic traits, such as the plant canopy, plant height, leaf yield and colour, and the rooting system. However, there has been no sign of fruit bearing so far. Hence, we harvested leaf samples, dried, and prepared tea thereof, subsequently subjecting the tea samples to a panel of 12 members taste (flavour) testers. The colour, aroma, flavour, etc. received “high” note by 97 % of the testers. The leaf was subjected to traditional fermentation and blended with “Tej” — popular beehive honey mead as a health promoting nutritional supplement. There was a positive response to the locally grown “new tea” of seabuckthorn leaves. Among the major challenges facing seabuckthorn in Ethiopia are, very low seed viability and germination (about 8–14 %), the dying-back of the seedlings at the very early stage, absence of root system (Figure 1) with root hairs by about 88 % of the seedlings and drought. We recommend a short training of personnel to enable the introduction of seabuckthorn suitable to grow in Ethiopia. We expect that ISA can play a role to take this program off the ground and bring seabuckthorn to the next level for Africa in general and Ethiopia in particular.

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