

Ziyanm Gwadeloup pa ka bout Never-ending yams in Guadeloupe



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INTRODUCTION



Source : H. Shiwachi (Univ. Tokyo)

Figure 1 : Cultivation of *D. alata* in gutters in Japan.

Yam is a secular crop

and a staple food for many populations around the tropical world. The diversity of species and cultivars is as high as the range of their associated cropping systems. Thus in Asia, some yam cultivars are grown at very high density and planted in « gutter-type tuber-support-containers » (Figure 1). The main objective of this preliminary study is to test the feasibility of such system under Caribbean conditions and to select adapted cultivars.

METHOD

The experiment was set in 2015 at the INRA experimental station in Duclos where yam setts (100g) were planted at high density (6 plants per m²) in these «gutter-type tuber-support-containers». Setts were then covered with a mixture of compost and soil and paper mulch for weed control (Figure 2).

Origin	Cultivar name (identifier)
CRB ¹	27_Divin 1 (PT-IG-00010)
CRB	56_DA 27 (PT-IG-00037)
CRB	63_Ti Joseph 1 (PT-IG-00044)
CRB	87_Tahiti cultivé/Anba Bon (PT-IG-00068)
DARD ²	Wanorak
DARD	Nepelev
CRB	614_Montpellier (PT-IG-00550)

¹ CRB : Biological Resource Centre Tropical Plants (Guadeloupe).

² DARD : Department of Agriculture and Rural Development (Vanuatu)

Table 1 : Origin and vernacular names of tested cultivars.

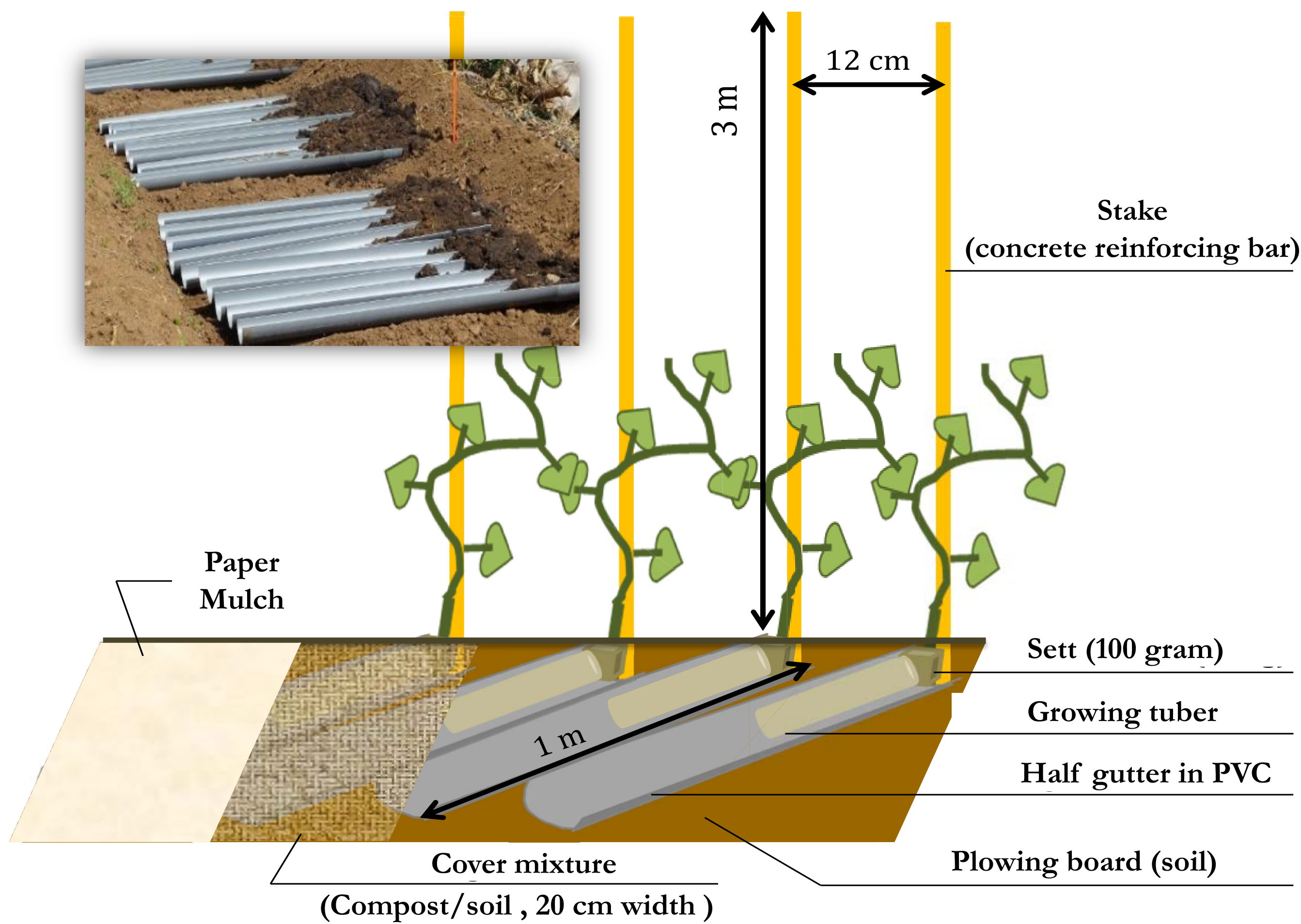


Figure 2 : Schema of the yam cropping system with gutter-type tuber-support-container in Guadeloupe in 2015.

The experimental plot was irrigated and in total 7 cultivars of *D. alata* were planted: 3 local cultivars, 2 cultivars from the Biological Resource Centre Tropical Plants and 2 cultivars from Vanuatu (Tableau 1).

RESULTS

First results showed high cultivar differences (Figures 3 et 4). Four cultivars showed a high yield above 50 tons.ha⁻¹. No local cultivar tested showed a good development in gutters. However, cultivars Wanorak et Nepelev showed uniform and graded tubers (1 meter length for 1.4kg).



Figure 3 : Grades of the tested cultivars in Duclos in 2015.

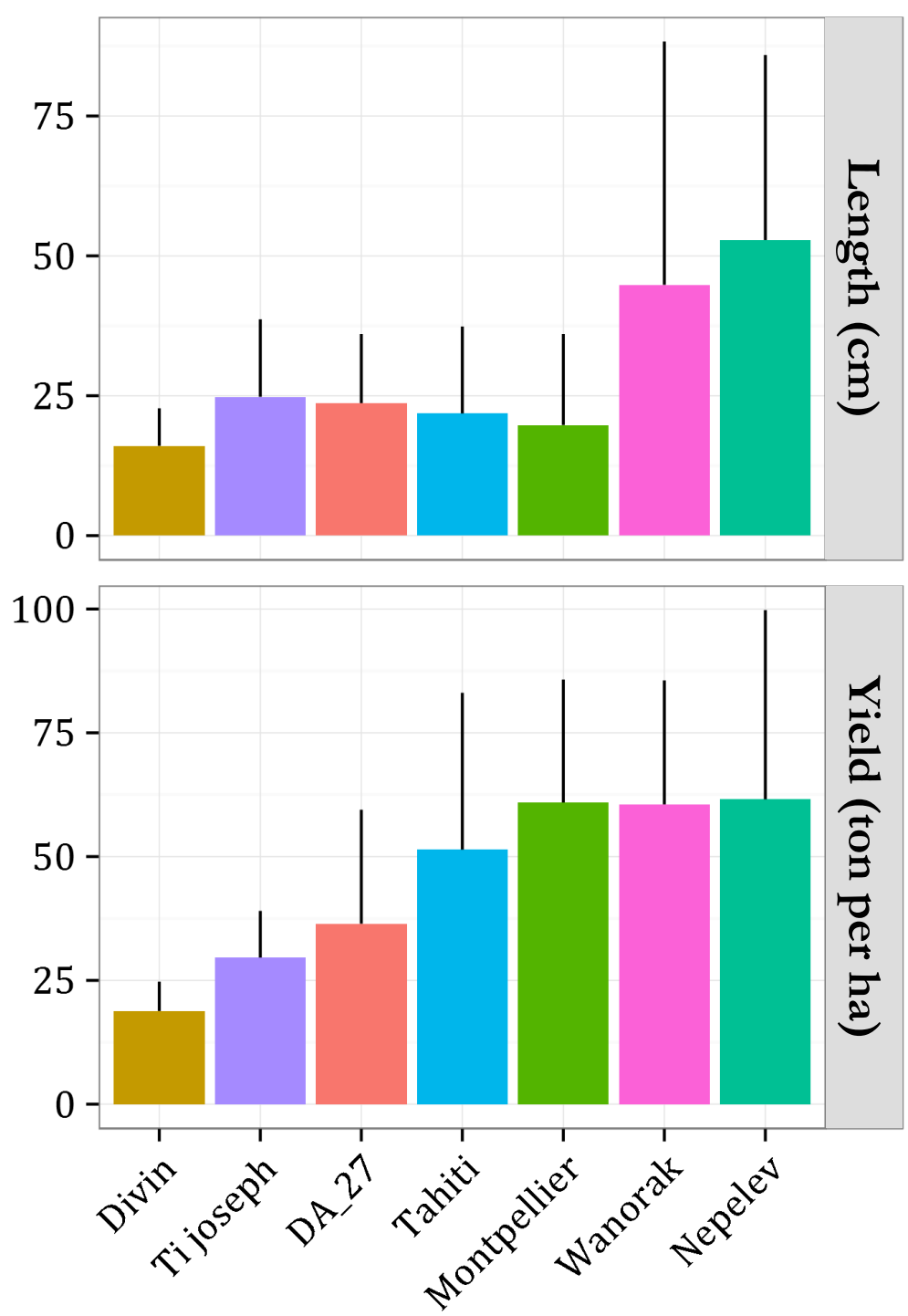


Figure 4 : Comparison of grades and yield components among cultivars.

CONCLUSION

To our knowledge, yam cropping system in « gutter-type tuber-support container » had never been tested before in the Caribbean. First results are promising, especially for 2 cultivars from Vanuatu which show very good agronomic performance. Over time, these graded tubers adapted to processing, could represent an alternative for local communities (i.e mass catering). But before, it is necessary to validate obtained results and complete them with a technical-economic analysis.

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