

DACRYODES EDULIS

Farmers preferences

Franzel et al (2008) carried out a priority setting exercise in Nigeria, Cameroon and Ghana, and found that *Dacryodes edulis* was the third most preferred indigenous tree species in Nigeria and Cameroon. Sixty-four percent of respondents mentioned the species in the humid lowlands of Nigeria while 67% mentioned it in Cameroon, with an average preference score of 6.2 in Nigeria and 4.6 in Cameroon (NB: 10 indicates a ranking of 1st, , 9 a ranking of 2nd, etc)

Awono et al (2002) show that *d.edulis* is the third most important fruit crop, after banana and kola, in terms of production value in Cameroon.

Ndoye et al (1997) indicate that of four forest products (*Dacryodes edulis*, *Cola acuminata*, *Ricinodendron heudelotii* and *Irvingia* spp.) studied in Cameroon in 1995, dacryodes was the most important both in terms of quantity and value.

Ayuk et al (1999) carried out a study on uses, management and economic potential of dacryodes in the humid lowlands of Cameroon and found that it is among the top two species in value in the region. Approximately 60% of the production is consumed and hence, the species plays an important role for food security.

Aiyelaagbe et al (1998) show that in the humid lowlands of Nigeria 20% of farmers within the system rated dacryodes as their most important tree while 34% rated it as their second most important (after *Irvingia wombulu*, *Garcinia cola*, *Treculia africana*, *Cola nitida*, *Elaeis guineensis* or *Chrysophyllum albidum*). The species was rated as the most important high value tree in Rivers State and the second most important in Enugu, Cross River, and Akwa Ibom States.

Extent of adoption

Ayuk et al (1999) indicates that farmers have a strong interest in growing dacryodes. Most farmers plant seedlings and most have opinions as to how the species could be improved.

A study by Schreckenberget al (2002) in Benin shows that dacryodes accounts for an important share of the total number of fruit trees found on farms. The proportion of dacryodes of all fruit trees ranged from 21% to 57% (Table 1)

Table 1: Mean number of fruit trees and *D. edulis* per farm in the study communities

| Community | Mean no. of fruit trees per farm | Mean no. of <i>D. edulis</i> per farm | <i>D. edulis</i> as a proportion of all fruit trees |
|--------------|----------------------------------|---------------------------------------|---|
| Chopfarm | 45 | 20 | 43% |
| Elig Nkouma | 93 | 26 | 28% |
| Nko'ovos II | 89 | 19 | 21% |
| Makenene Est | 174 | 100 | 57% |

Source: Schreckenberget al (2002)

A study by Aiyelaagbe et al (1998) on agroforestry potential of dacyodes in Nigeria indicates that the average farmer has approximately 9.3 trees.

Economics of production

Yield

Most farmers report yields of 20-50 kg of fruit per tree per year. For an orchard with 100-200 female flowering trees per ha, annual yields of 10 t/ha are feasible (Verheij 2002).

Ayuk et al (1999) found that dacyodes fruit prices in the humid lowlands of Cameroon vary greatly by season and by fruit size. Early in the season prices are usually high. The lowest prices are observed at the middle of the season. Peak production is during the period June-August in all three divisions i.e Lekie, Mvila and Haut Nyong. Based on prevailing prices in the division, the species can contribute from USD 63.00 to USD 127.00 to household income each year (Table 2)

Table 2: Mean annual production estimates of *D. edulis* fruits in the humid lowlands of Cameroon in USD/ hectare

| Variables | Volumes | Values |
|-------------------------|---------|---------|
| Production (kg) | 326 | |
| Sales (kg) | 122 | |
| Consumption (kg) | 196 | |
| Other (kg) | 7 | |
| Prices USD/kg | | |
| Beginning season prices | | 0.206 |
| Middle of season prices | | 0.314 |
| End of season prices | | 0.214 |
| Production Values/farm | | |
| Beginning season prices | | 101.886 |
| Middle of season prices | | 50.824 |
| End of season prices | | 82.544 |

Source: Ayuk et al. 1999.

1 USD= 500FCFA

The study by Ayuk et al (1999) notes that, on average, about 60% of the total quantity of dacyodes produced per household is for home consumption. The study indicates that, in Cameroon, the mean annual value of dacyodes production was estimated at USD 15 and USD 132 per grower in two regions having low and high market accessibility respectively.

Marketing

According to Awono et al. (2002) annual domestic demand for dacyodes in Cameroon, is 2,324 tonnes per year, with an estimated value of USD 1,665,079 per year. The study shows that total imports to Europe in 1999 were estimated at over 326 tonnes, with a value of USD 2 million

(Table 3). Of the three countries France is the biggest importer followed by United Kingdom then Belgium, This is attributed to number of immigrants from the dacryodes producing countries.

Table 3: Quantities and value of *D.edulis* imported to Europe in 1999

| Importing Countries | Quantities imported (tonnes) | Values generated (USD) |
|---------------------|------------------------------|------------------------|
| France | 200 | 1,500,000 |
| United Kingdom | 120 | 900,000 |
| Belgium | 6 | 56,000 |

Source: Awono et al. (2002)

USD = CFA 685 (1997)

USD = CFA 630 (1999)

The study also indicates that Europe is a major importer of the fruits (Table 4)

Table 4: Distribution of *D. edulis* consumers in main importing countries in Europe in 1993/94.

| Exporting country | Importing countries (number of consumers) | | |
|--------------------------|---|--------|----------------|
| | Belgium | France | United Kingdom |
| Cameroon | | 18,037 | |
| Congo Brazzaville | | 12,755 | |
| Congo Kinshasa | 15,868 | 22,740 | 8,000 |
| Gabon | | 3,013 | |
| Nigeria | | 873 | 34,000 |
| Central African Republic | | 4,059 | |
| Total | 15,868 | 61,477 | 42,000 |

Source: Awono et al. (2002)

Further reading

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