Age structure of *Dracaena draco* subsp. *draco* on Tenerife Island

Lucie Bauerová, Jana Tulková, Hana Habrová

Department of Forest Botany, Dendrology and Geobiocoenology
Faculty of Forestry and Wood Technology
Mendel University in Brno

Introduction

Dracaena draco* subsp. *draco is native to Canary Islands, but naturally occurs only on Gran Canaria and Tenerife. On Tenerife Island, wild populations are rare, however, it is artificially cultivated here.

There is still a gap within the age of this species. As *Dracaena* species do not create tree rings by which could be calculated the age of the trees, the age can be estimated either by indirect method focused on the probability of flowering (published by Adolt and Pavliš (2004) and Adolt et al. (2012) for *D. cinnabari*) or by direct method. The presented project is focused on direct method which has not been used yet.

Material and Methods

We focused on artificially planted individuals. The direct method to know the age of this species consisted in questionnaire survey of local people if they know when they planted their dragon tree which usually occured in their home gardens.

Also DBH, trunk height and number of branch orders were measured.

Both south and north populations were measured and analysed separately due to quite different conditions between each other (there is more precipitation per year on the North of the Island).

Results and Discussion

The most abundant (overall) age class is 21–30 years. The same applies for the north population. Within the south population, the most abundant age class is 1–10 years.

The both populations are quite young (except few very old trees on the North of the Island where the age can be only guessed; see photo), if we compare it for example with *D. cinnabari* on Socotra Island (Yemen) where the populations are estimated to be much more older (Adolt et al., 2012). However, *D. draco* is probably faster growing species (Krawczyszyn and Krawczyszyn, 2016) than *D. cinnabari* (Maděra et al., 2020), thus can grow to larger sizes in shorter period of time.

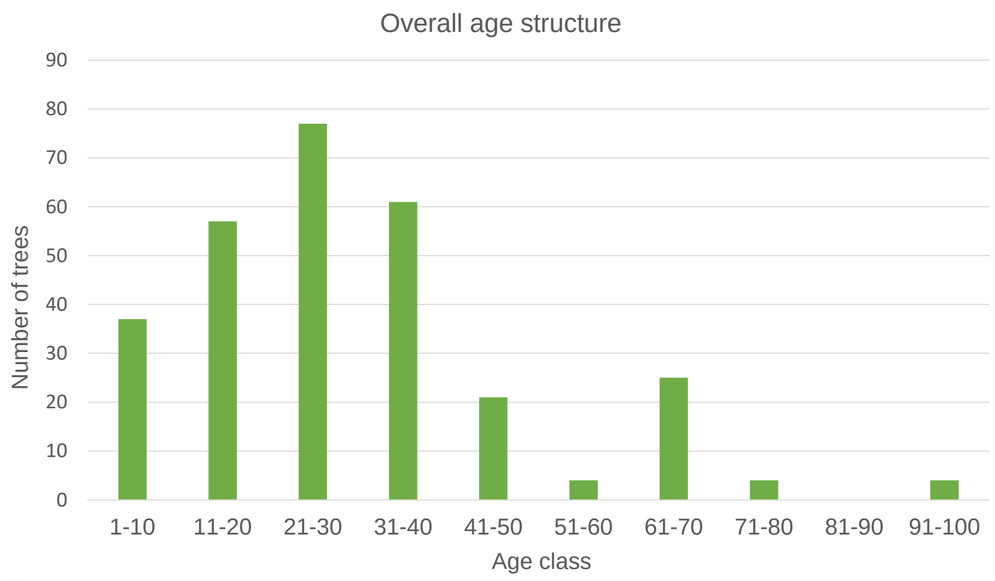

Fig. 1: Overall age structure

Fig. 2: Age structure of north population

Fig. 3: Age structure of south population

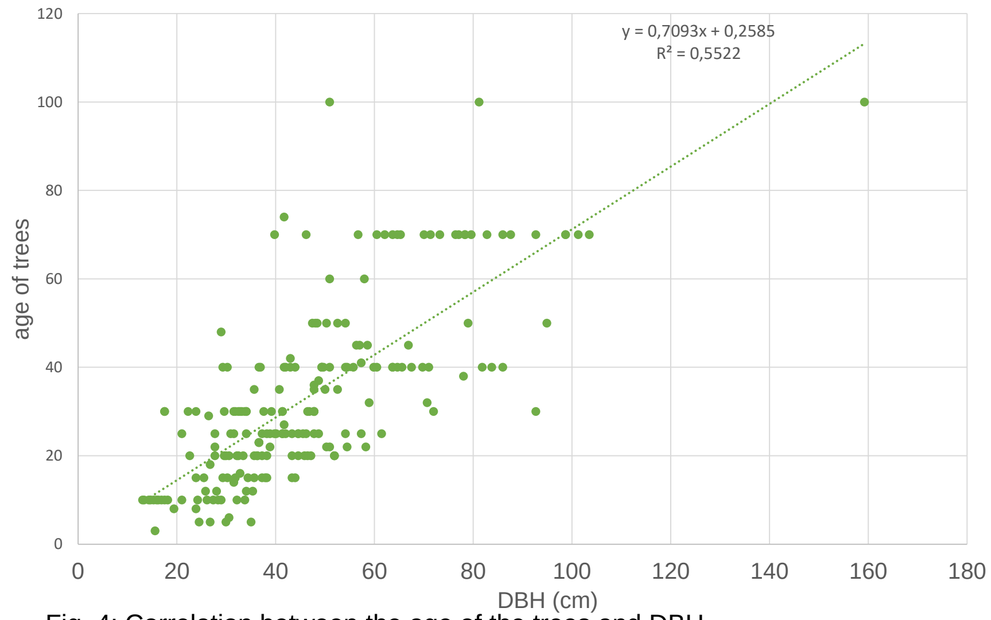

Fig. 4: Correlation between the age of the trees and DBH

Photo: M. Čermák

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