

# Save *Dodonea viscosa*, an initiative for preservation/conservation of a threatened medicinal plant for comminatory usage

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## ABSTRACT

Climate changes, human pressure and medicinal needs of *Dononea viscosa* constitute synergic factors contributing to the threat of the plant. Based on biotechnological studies realized at Togo and on ethnobotanical approach for save guard of endangered medicinal plants established by CERFOPLAM/ University of Lomé, home and garden's cultivation of this medicinal plant conducted to its preservation and conservation.

A Project named ProSADOVIS (Program for safeguard of *Dodonea viscosa*) is created consequently created at Togo in 2017. From this period to now, the 6 feet of the plant cultivated produced more than 5274 seeds available for large speed cultivation in farm for joining agroforestry to agricultural management to safeguard the precious but threatened medicinal plant.

## BACKGROUND

*Dodonea viscosa* (DV) used to treat malaria, in Togo (West Africa) is threatened (Koudouvo *et al.*, 2011, 2017). Germination's biotechnical method for its cultivation was established (Tozo *et al.*, 2004). The aim of this study is to produce seeds of DV for wide scale cultivation for preservation/conservation and availability of this plant for comminatory usage in the treatment of malaria in Togo and in West Africa.

## METHODOLOGY

- ❑ Eight young plants obtained, were cultivated 4 in each site in July and August 2017. During the period of fruits production (Fig. 1 and 2), seeds were harvested every week.
- ❑ Young plants of DV identified by Akoegninou *et al.* (2006) were obtained from the traditional garden of the Togolese NGO "Sauve Flore". Floristic garden of Faculty of Sciences/University of Lomé/Togo (FG/FDS/UL/T) and the Royal Court of Ewe People of Bè/Lomé/Togo (RC/EP/BL/T) were sites of plantation of DV.

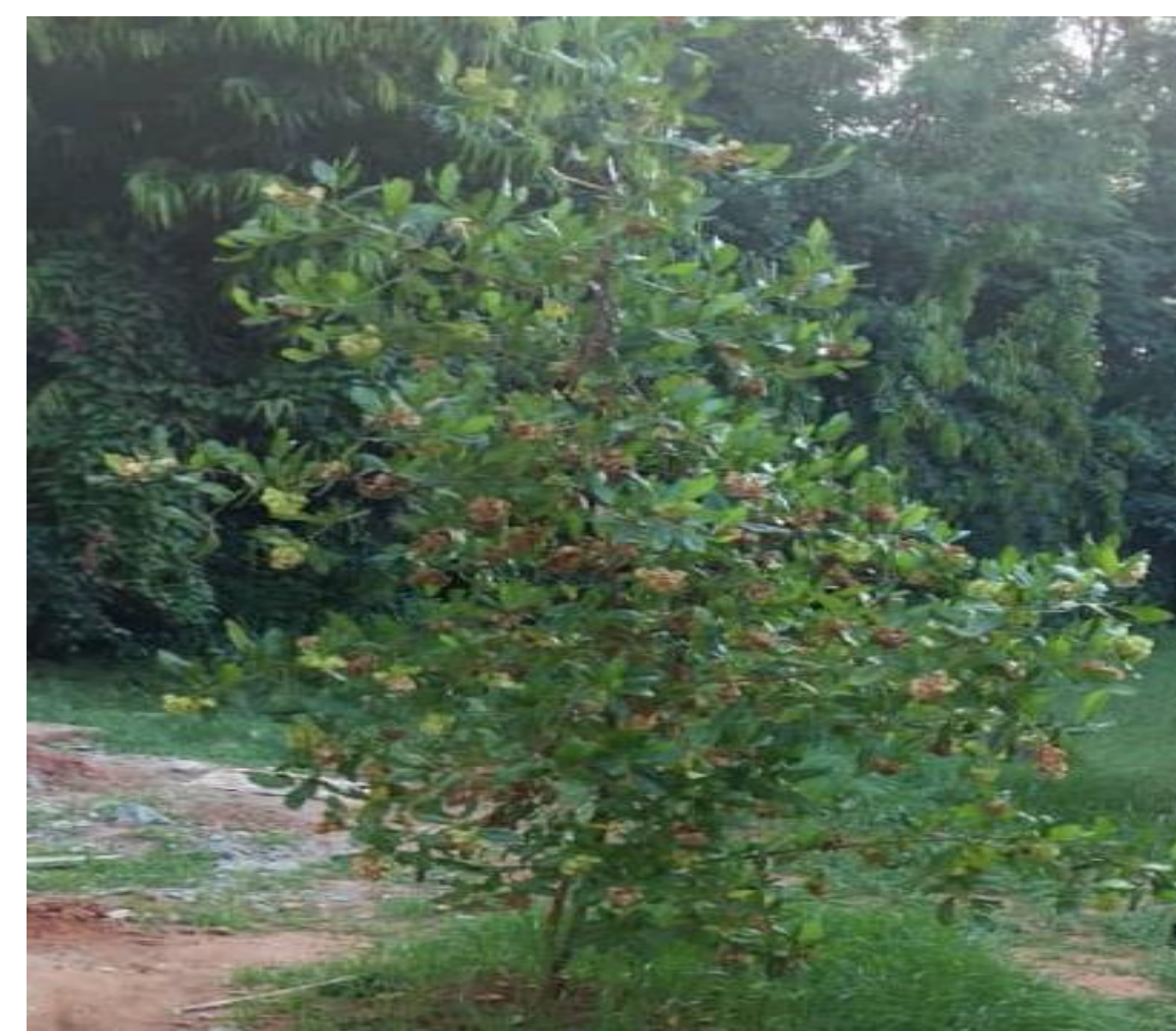


Fig 1: Plant of DV in FG/FDS/UL/T



Fig 2: Plant of DV in RC/EP/BL/T

## RESULTS & DISCUSSION

- ❑ From the eight plants, three have survived in each site of cultivation.

Fruits obtained from the plants (Fig 3)

- ❑ Fruits have produced till to September 2018, 1325 and 3849 seeds respectively at RC/EP/BL/T and FG/FDS/UL/T (Fig 4). The 6 plants are still producing fruits and seeds



Fig 3: Fruits of DV produced



Fig 4: Seeds of DV produced

## CONCLUSION

The cultivation of DV in home court and in garden could contributed to the availability of this threatened plant. The production of seeds of DV in garden is better than in court. ProSADOVIS is planning to cultivate DV in 2000 home courts of Lome and on 2 ha in the farm of UL.

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