

# Ethnobotanical study of medicinal plants used against sickle cell anaemia in the eastern part of the Côte d'Ivoire

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## 1 SUMMARY

An ethnobotanical survey was conducted to record the various plant families, species, and plant parts used to manage sickle cell disease in the Indenié-Djouablin region eastern Côte d'Ivoire. Nine traditional healers aged 36 to 67 years old were selected in six different villages according to their reputation in knowledge of traditional medicine, their availability and their willingness to share information. A total of 26 species of plants belonging to 20 families were reported to have antisickling activity. Eleven (11) different medication recipes were composed from these 26 species of plants (*Afromonum melegueta* (Roscoe) K. Schum., *Xylopiya aethiopica*). The main plant parts used were stem bark (38%) followed by fruit (18%) and seeds (18%). The majority of the main plants recorded (84.61 %) were wild. From the recorded plants, 65.38 % were trees and 23.07 % shrubs. Most remedies (82%) were made up by decoction and were employed orally (54 %) or by enema (32 %). The potential anti-sickling activity of the plant species recorded during this study could be the effect of alkaloids, polyphenols, quinones and terpenoids compounds found during the phytochemical screening of the 26 plants species.