**Wood anatomy and multiseriate ray vessels: study case of *Sericostachys scandens*, National Park of Kahuzi-Biega (Democratic Republic of Congo)**

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**Keywords:** Kahuzi-Biega National Park, liana, ray vessels, *Sericostachys scandens*,

successive cambiums, wood anatomy

*Sericostachys scandens* Gilg & Lopr. (Amaranthaceae) is a native liana of the altitude of the

Albertine Rift regions. It invaded the crown of trees especially those of secondary formations.

Anatomically, the characters of *S. scandens* wood are unpublished. Six washers of individuals were collected from three typical ecosystems of this liana and kept in Acetic Aldehyde Formalin (FAA) during five days before getting soaked in Polyethylene glucol 1500 in the laboratory. Wood permanent cuts were stained with safranine-alcian blue and attached to the Euparal. Those of primary wood, unstained, have been set at the glycerin. Observation of primary and secondary wood slides have been done with optical microscopy, but associated with Scanning Laser Confocal Microscopy (MCLB) and Microscopic Epifluorescence (EFM).The protoxylem vessels are annular and helicoidal thickenings. The metaxylem vessels are dimorphic in relation to the tangential vessel diameter. The secondary growth of the stem of *S. scandens* is abnormal following the successive cambium, comparatively to studies of Amaranthaceae (Rajput 2002, Carlquist 2003), which derives observed vessels at the level of multiseriate rays which horizontal conduction continues to the bark *(*ray vessels in canal with continuity in bark). The rays irrigated by the mineral sap by helicoidal vessels and tracheids reflect less evolved state from the Amaranthaceae compared with other higher plants (Carlquist 1999).

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