A checklist of vascular plants of the W National Park in Burkina Faso, including the adjacent hunting zones of Tapoa-Djerma and Kondio

Blandine M.I. Nacoulma, Marco Schmidt, Karen Hahn, Adjima Thiombiano

‡ Université Joseph Ki-Zerbo, Ouagadougou, Burkina Faso
§ Senckenberg Biodiversity and Climate Research Centre, Frankfurt am Main, Germany
¶ Palmengarten, Frankfurt am Main, Germany
¶ Goethe University, Frankfurt am Main, Germany

Corresponding author: Marco Schmidt (mschmidt@senckenberg.de)

Abstract

Background

The W National Park and its two hunting zones represent a unique ecosystem in Burkina Faso for biodiversity conservation. This study aims at providing a detailed view of the current state of the floristic diversity as a baseline for future projects aiming at protecting and managing its resources. We combined intensive inventories and distribution records from vegetation plots, photo records and herbarium collections.

New information

This is the first comprehensive checklist of vascular plants of the Burkina Faso part of the transborder W National Park. With 721 documented species including 19 species new to Burkina Faso, the Burkina Faso part of the W National Park is, so far, the nature reserve with most plant species in Burkina Faso. To a large extent, this may be assigned to its high...
habitat diversity and moderate degree of disturbance, but also to a relatively large area within an even larger complex of neighbouring protected areas, as well as comprehensive spatial, ecological and seasonal sampling efforts. However, as a World Heritage Site and regarding the current general context of insecurity, the W National Park and the entire WAP Complex require more international attention in order to ensure its conservation.

Keywords

plant diversity; new species; flora of Burkina Faso; protected areas; WAP Complex; West Africa

Introduction

In times of growing land use pressure in West Africa, protected areas play an increasingly important role in the conservation of wildlife as well as plant species (Clerici et al. 2007, Zoungrana et al. 2018). The W-Arly-Pendjari Complex (WAP Complex) is the largest transborder complex of West African nature reserves shared amongst the three countries Benin, Burkina Faso and Niger and a World Heritage Site of the UNESCO (UNESCO World Heritage Committee 2017). The three partner countries seek to further optimise and formalise joint management systems for the regional park, which are already partially in place (Miller et al. 2015). Remote sensing studies (Schulte to Bühne et al. 2017) showed vegetation cover within the protected areas to remain relatively stable, while decreasing in the surroundings between 2000 and 2013. Due to agricultural expansion and intensification, especially in the context of cotton farming, the WAP Complex is becoming increasingly isolated (Clerici et al. 2007, Konrad 2015), leaving little space for near-natural habitats in the surrounding communal area, being composed of croplands, fallows of different ages and only few savannas in sites unsuitable for agriculture.

The complex is well-known for its role in the conservation of large mammals and typical Sudanian savanna ecosystems (e.g. Thiombiano et al. 2010, Thiombiano and Kampmann 2010, see next paragraph for more details). It is a continuous area of nine protected areas which include the trinational complex of W Regional Park (named after the course of the river Niger forming a “W” in this area), Arly National Park in Burkina Faso and Pendjari National Park in Benin connected and enlarged by protected areas of other categories and hunting reserves (Konrad 2015).

The wildlife, especially the large mammals (Lamarque 2004) and birds (Balança et al. 2007) of the WAP Complex, is well documented. Likewise, the flora of W National Park of Niger (Mahamane 2005), Arly (Ouédraogo et al. 2011), Pama (Mbayngone et al. 2008) and Pendjari (Assédé et al. 2012) have recently been documented by published checklists. The flora of the W National Park in Burkina Faso, however, remained scarcely and poorly documented.
The present checklist has been produced to fill this gap by providing a comprehensive and detailed view of the floristic diversity of the W National Park including the surrounding hunting reserves in Burkina Faso as a baseline for future projects aiming at protecting and managing the resources of the WAP Complex. We assume that the core area has a high plant diversity due to the geographical and climatic setting, as well as the diversity of its habitats.

**Materials and methods**

**Study area**

The W National Park (235,000 ha) and its two hunting reserves, Kondio (also called Kourtiaou 51,000 ha) and Tapoa Djerma (30,000 ha) are located in eastern Burkina Faso, between 12.4° and 11.4° N and 1.8° and 2.4° E (Fig. 1). The W National Park in Burkina Faso, together with its equivalents in Benin and Niger, constitute a transfrontier park that is designated “wetland of international importance” under the Ramsar Convention in 2007. Altogether, they are part of the larger W-Arly-Pendjari transfrontier complex shared amongst the three countries Benin, Burkina Faso and Niger and one of the most important West African transboundary Biosphere Reserves of UNESCO-MAB.

![Map of W National Park in Burkina Faso and adjacent hunting zones with georeferenced occurrence records, considering different geomorphological units.](image)
Figure 2.
Species newly documented for the flora of Burkina Faso.

a: *Ampelocissus bombycina* (Photo by Meike Piepenbring) doi
b: *Aponogeton vallisnerioides* doi
c: *Gladiolus unguiculatus* doi
d: *Indigofera garckeana* doi
e: *Jatropha atacorensis* doi
f: *Selaginella buchholzii* doi
The national park belongs to IUCN Category II, whereas the hunting reserves belong to Category IV. Both categories act to protect large terrestrial and aquatic ecosystems, as well as threatened and rare species (both fauna and flora), serving as refuges and enhancing resilience. The National Park and the hunting zones are managed by prescribed fires ignited in October or November every year to mitigate the effect of accidental late fire and also to stimulate an off-season re-growth of perennial herbs for wildlife and to open the vegetation and increase the visibility of animals for tourists.

The W National Park and the two adjacent hunting zones of Burkina Faso are located in the Sahelo-Sudanian climate zone with an average rainfall of 750 to 950 mm, annual mean temperatures between 26 and 29°C and a dry season of 6-7 months. It belongs to the Pendjari-Mekrou biogeographical sector, shared between the Volta basin in its southern part and the Niger basin in the north. In the central western part of W National Park, eastern outliers of the Gobnangou range reach into the park and eastern outliers of the Atakora mountains are located on the southern edge of Kondio reserve and W National Park. The largest rivers in the reserves are the Mekrou on the eastern border and the Tapoa in the north, both tributaries of the Niger. In addition to the artificial water points, there are also numerous natural pools, with permanent and/or temporary water regimes (PNUD 2004). The vegetation is composed of a mosaic of various types of savannas i.e. woodland, grass, shrub and tree savanna, dry and gallery forests (Fontès and Guinko 1995), mostly distributed along elevation and soil gradients (Nacoulma et al. 2011).

**Data collection and management**

The checklist is a result of extensive field surveys by the first author during the years 2007-2010, (622 records from a species list based on 369 vegetation plots; Nacoulma 2012), as well as photo records (545 records; Dressler et al. 2014, Schmidt et al. 2016) and herbarium collections from the W National Park, including the herbaria of OUA, FR (733 and 583 records via their respective collection databases) and WAG (five records via GBIF). The vegetation plots followed standard sizes of 10 m x 10 m for the herb layer and 10 m x 50 m or 30 m x 30 m for the woody layer shown to be suitable for the characterisation of Sudanian savanna vegetation by Hahn-Hadjali (1998) and Ouédraogo (2006). They were taken mostly during the end of the rainy season (September-October) in order to maximise the number of flowering individuals for identification. The smaller plots for herbas were randomly located inside the corresponding plots for woody plants. The locations were chosen by a stratified random design using satellite images and soil maps to best represent the geomorphological units (colluvial plains: 5, floodplain: 17, lower slope glacis: 45, mid-slope glacis: 101, upper slope glacis: 54, hardpan hillocks: 18, hardpan glacis: 73, shallows: 31, sandstone hills: 25) and vegetation types (woodland: 39, gallery forest: 17, savanna woodland: 58, tree savanna: 92, shrub savanna: 134, grass savanna: 29) following the definitions of the Yangambi conference (Conseil Scientifique pour l'Afrique au Sud du Sahara 1956), while taking accessibility into account (see Fig. 1 for the plot locations and geomorphological units). Herbarium and photo records were partly taken during the afore-mentioned work on vegetation plots, partly during collecting expeditions for the assessment of Burkina Faso's flora, focussing on previously under-sampled
habitats (van der Burgt et al. 2010) and in the course of other research in the area with different focus (Erpenbach et al. 2012, Schumann et al. 2016, Zwarg et al. 2012). For data analysis, all these records have been combined into an MS Access database. Species concepts and synonymy, as well as families, follow Thiombiano et al. (2012) and, for orthographic corrections of primary data, we used the Taxonomic Name Resolution Service (TNRS; http://tnrs.iplantcollaborative.org). In order to identify species new to the flora of Burkina Faso, we compared the total floristic list of the study area to the catalogue of Burkina Faso’s vascular plants (Thiombiano et al. 2012), supplemented by new species records from Schmidt (2018). Introduced species have been identified using a list extracted from Thiombiano et al. (2012), based upon distribution notes and contributed to the Global Register of Introduced and Invasive Species (Schmidt et al. 2020).

**Species identification**

Species have been identified using the Flora of West Tropical Africa (Hutchinson and Dalziel 1972), Flore Analytique du Bénin (Akoegninou et al. 2006), as well as group-specific literature for grasses (Poilecot 1995, Poilecot 1999), orchids (Perez-Vera 2003) and woody plants (Arbonnier 2000) in combination with online guides such as African Plants - a photo guide (Dressler et al. 2014) and the herbarium collections of Ouagadougou University (OUA) and Herbarium Senckenbergianum (FR).

**Notes on the checklist**

The list is arranged alphabetically by family and species. Synonyms are only given if these have been used in our primary data in herbarium, vegetation plot or photo records. Herbarium records are given with collector and collector’s number, followed in parentheses by herbarium code and herbarium number. Photo records are marked with APPG (African Plants - a photo guide: Dressler et al. 2014) and the photo ID within the guide’s website and database. New country records are specifically mentioned as "New species record for Burkina Faso". Introduced species are marked by "(introduced)" following the distribution type.

**Vascular plants of W National Park, Burkina Faso and adjacent hunting zones**

**Family Acanthaceae**

*Blepharis linariifolia* Pers.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schumann (APPG-3817)
**Blepharis maderaspatensis** (L.) B.Heyne ex Roth

*Distribution:* Pantropical

*Notes:* Life Form: therophyte; Voucher: Zwarg 118 (FR)

**Dicliptera paniculata** (Forssk.) I.Darbysh.

*Nomenclature:*

*Peristrophe paniculata* (Forssk.) Brummitt|*Peristrophe bicalyculata* (Retz.) Nees

*Distribution:* Pluriregional African

*Notes:* Life Form: therophyte; Voucher: Nacoulma 207 (OUA-13570)

**Dyschoriste nagchana** (Nees) Bennet

*Nomenclature:*

*Dyschoriste* perrottetii (Nees) Kuntze

*Distribution:* Pantropical

*Notes:* Life Form: therophyte; Voucher: Schmidt et al. (FR-0007461)

**Hygrophila auriculata** (Schumach.) Heine

*Distribution:* Pantropical

*Notes:* Life Form: therophyte; Voucher: Schmidt et al. (FR-0007402)

**Hygrophila senegalensis** (Nees) T.Anderson

*Distribution:* Sudanian

*Notes:* Life Form: geophyte; Voucher: Nacoulma 4509 (OUA-17092)

**Hypoestes aristata** (Vahl) Roem. & Schult.

*Nomenclature:*

*Hypoestes* verticillaris (L.f.) Sol. ex Roem. & Schult.

*Distribution:* Pantropical

*Notes:* Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007656)

**Justicia flava** (Forssk.) Vahl

*Distribution:* Afrotropical
Notes: Life Form: chamaephyte; Voucher: Schmidt et al. (FR-0007646)

**Justicia insularis** T.Anderson

Distribution: Sudano-Zambesian

Notes: Life Form: therophyte; Voucher: Zwarg 102 (FR)

**Lepidagathis anobrya** Nees

Distribution: Sudanian

Notes: Life Form: chamaephyte; Voucher: Nacoulma (APPG-70171)

**Lepidagathis collina** (Endl.) Milne-Redh.

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Nacoulma 71 (OUA-13435)

**Monechma ciliatum** (Jacq.) Milne-Redh.

Distribution: Afrotropical

Notes: Life Form: therophyte; Voucher: Zwarg 47 (FR)

**Monechma depauperatum** (T.Anderson) C.B.Clarke

Distribution: Afrotropical

Notes: Life Form: chamaephyte; Voucher: Nacoulma (OUA-17240)

**Nelsonia canescens** (Lam.) Spreng.

Distribution: Pantropical

Notes: Life Form: therophyte; Voucher: Nacoulma 204 (OUA-13567)

**Phaulopsis barteri** T.Anderson

Distribution: Afrotropical

Notes: Life Form: therophyte; Voucher: Schmidt et al. (FR-0007431)
Family Alismataceae

**Burnatia enneandra** Micheli

**Distribution:** Afrotropical

**Notes:** Life Form: hemicryptophyte; Voucher: Schmidt et al. (FR-0007398)

**Butomopsis latifolia** (D.Don) Kunth

**Distribution:** Afrotropical

**Notes:** Life Form: hemicryptophyte; Voucher: Schmidt (APPG-4847)

**Limnophyton obtusifolium** (L.) Miq.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4943 (OUA-17285)

**Sagittaria guayanensis** Kunth

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 73 (OUA-13437)

Family Amaranthaceae

**Achyranthes aspera** L.

**Nomenclature:**

*Achyranthes argentea* Lam.

**Distribution:** Pantropical

**Notes:** Life Form: chamaephyte; Voucher: Zwarg 45 (FR)

**Alternanthera sessilis** (L.) R.Br. ex DC.

**Distribution:** Pluriregional African

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 194 (OUA-13557)

**Celosia trigyna** L.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: therophyte; Voucher: Schumann 101 (FR-0083347)
**Pandiaka angustifolia** (Vahl) Hepper

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: therophyte; Voucher: Zwarg 12 (FR)

**Pandiaka involucrata** (Moq.) B.D.Jacks.

*Distribution:* Sudanian

*Notes:* Life Form: therophyte

**Pupalia lappacea** (L.) Juss.

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte; Voucher: Schumann (FR-0083346)

**Family Amaryllidaceae**

**Crinum distichum** Herb.

*Distribution:* Sudanian

*Notes:* Life Form: geophyte

**Crinum ornatum** (Aiton) Herb.

*Distribution:* Pluriregional African

*Notes:* Life Form: geophyte; Voucher: Nacoulma (APPG-69869)

**Pancratium tenuifolium** Hochst. ex A.Rich.

*Distribution:* Guineo-Congolian-Sudano-Zambesian

*Notes:* Life Form: geophyte; Voucher: Katharina Schumann (APPG-3417)

**Pancratium trianthum** Herb.

*Distribution:* Guineo-Congolian-Sudano-Zambesian

*Notes:* Life Form: geophyte; Voucher: Nacoulma 4586 (OUA-17164)

**Scadoxus multiflorus** (Martyn) Raf.

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: geophyte; Voucher: Katharina Schumann (APPG-2330)
Family Anacardiaceae

*Haematostaphis barteri* Hook.f.
- **Distribution:** Sudanian
- **Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007486)

*Lannea acida* A.Rich.
- **Distribution:** Sudanian
- **Notes:** Life Form: phanerophyte; Voucher: Zwarg 107 (FR)

*Lannea barteri* (Oliv.) Engl.
- **Distribution:** Sudanian
- **Notes:** Life Form: phanerophyte

*Lannea microcarpa* Engl. & K.Krause
- **Distribution:** Sudano-Zambesian
- **Notes:** Life Form: phanerophyte; Voucher: Zwarg 60 (FR)

*Lannea velutina* A.Rich.
- **Distribution:** Sudanian
- **Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70154)

*Ozoroa obovata* (Oliv.) R. Fern. & A. Fern.
- **Nomenclature:**
  - *Ozoroa insignis* Delile
- **Distribution:** Sudano-Zambesian
- **Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007479)

*Ozoroa pulcherrima* (Schweinf.) R.Fern. & A.Fern.
- **Distribution:** Sudanian
- **Notes:** Life Form: phanerophyte
**Rhus crenulata A.Rich.**

**Nomenclature:**
*Rhus natalensis* Bernh. ex C.Krauss

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Thiombiano et al. 3308 (OUA)

**Sclerocarya birrea (A.Rich.) Hochst.**

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Katharina Schumann (APPG-2342)

**Spondias mombin L.**

**Distribution:** Pantropical

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007644)

**Family Annonaceae**

**Annona senegalensis Pers.**

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 73 (FR)

**Hexalobus monopetalus (A.Rich.) Engl. & Diels**

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 147 (OUA-13511)

**Uvaria chamae P.Beauv.**

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 4949 (OUA-17281)

**Xylopia aethiopica (Dunal) A.Rich.**

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte
Family Apocynaceae

*Baissea multiflora* A.DC.

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma 168 (OUA-13532)

*Calotropis procera* (Aiton) Dryand.

*Distribution:* Paleotropical

*Notes:* Life Form: phanerophyte; Voucher: Schumann (APPG-471)

*Caralluma adscendens* (Roxb.) R.Br.

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: chamaephyte; Voucher: Schumann (APPG-493)

*Ceropegia fusiformis* N.E.Br.

*Distribution:* Paleotropical

*Notes:* Life Form: phanerophyte

*Ceropegia racemosa* N.E.Br.

*Distribution:* Afrotropical

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma 57 (OUA-13422)

*Ceropegia rhynchantha* Schltr.

*Distribution:* Sudanian

*Notes:* Life Form: geophyte; Voucher: Schumann (FR-0083341)

*Cryptolepis oblongifolia* (Meisn.) Schltr.

*Nomenclature:*

*Ectadiopsis oblongifolia* (Meisn.) B.D.Jacks.

*Distribution:* Pluriregional African

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma 90 (OUA-13454)
Gymnema sylvestre (Retz.) R.Br. ex Sm.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 11 (OUA-13381)

Leptadenia hastata Vatke

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70173)

Oxystelma bornouense R.Br.

**Distribution:** Guineo-Congolian-Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Schumann (APPG-3866)

Pergularia daemia (Forssk.) Chiov.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Schumann (FR-0083339)

Raphionacme brownii Scott-Elliot

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Nacoulma 4542 (OUA-17120)

Saba comorensis (Bojer ex A.DC.) Pichon

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 150 (OUA-13514)

Saba senegalensis (A.DC.) Pichon

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007685)

Sarcostemma viminalle (L.) R.Br.

**Distribution:** Pantropical

**Notes:** Life Form: phanerophyte
Secamone afzelii (Roem. & Schult.) K.Schum.

**Distribution:** Guineo-Congolian

**Notes:** Life Form: phanerophyte; Voucher: Schumann (FR-0083338)

Sphaerocodon caffrum (Meisn.) Schltr.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 64 (OUA-13429)

Strophanthus sarmentosus DC.

**Distribution:** Guineo-Congolian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 4488 (OUA-17078)

Tacazzea apiculata Oliv.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 211 (OUA-13574)

Family Aponogetonaceae

_Aponogeton vallisnerioides_ Baker

**Distribution:** Guineo-Congolian

**Notes:** Life Form: hydrophyte; Voucher: Nacoulma (APPG-70417); New species record for Burkina Faso.

Family Araceae

_Amorphophallus abyssinicus_ (A.Rich.) N.E.Br.

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-69725)

_Amorphophallus baumannii_ (Engl.) N.E.Br.

**Nomenclature:**

Amorphophallus flavovirens N.E.Br.

**Distribution:** Sudanian
Notes: Life Form: geophyte; Voucher: Nacoulma (APPG-69730)

**Amorphophallus dracontioides (Engl.) N.E.Br.**

Distribution: Sudanian

Notes: Life Form: geophyte; Voucher: Nacoulma (APPG-69734)

**Anchomanes difformis (Blume) Engl.**

Distribution: Guineo-Congolian-Sudano-Zambesian

Notes: Life Form: geophyte

**Stylochaeton hypogaeus Lepr.**

Distribution: Sudanian

Notes: Life Form: geophyte; Voucher: Nacoulma (APPG-70382)

**Stylochaeton lancifolius Kotschy & Peyr.**

Distribution: Afrotropical

Notes: Life Form: geophyte; Voucher: Erpenbach (APPG-30290)

Family Arecaceae

**Borassus aethiopum Mart.**

Distribution: Sudano-Zambesian

Notes: Life Form: phanerophyte; Voucher: Nacoulma (APPG-69777)

**Hyphaene thebaica (L.) Mart.**

Distribution: Pluriregional African

Notes: Life Form: phanerophyte; Voucher: Zizka (APPG-3842)

Family Aristolochiaceae

**Aristolochia albida Duch.**

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Nacoulma (APPG-69746)
Family Asparagaceae

**Albuca nigritana (Baker) Troupin**

**Nomenclature:**

*Urginea nigritana* Baker

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: geophyte; Voucher: Schumann (FR-0083223)

**Asparagus africanus** Lam.

**Distribution:** Paleotropical

**Notes:** Life Form: geophyte

**Asparagus flagellaris** (Kunth) Baker

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69752)

**Chlorophytum blepharophyllum** Schweinf. ex Baker

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: geophyte; Voucher: Nacoulma 4588 (OUA-17187)

**Chlorophytum gallabatense** Schweinf. ex Baker

**Distribution:** Sudanian

**Notes:** Life Form: geophyte

**Chlorophytum geophilum** Peter ex Poelln.

**Distribution:** Sudanian

**Notes:** Life Form: geophyte

**Chlorophytum laxum** R.Br.

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Zwarg 108 (FR)
**Chlorophytum macrophyllum** (A.Rich.) Asch.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: hemicryptophyte; Voucher: Georg Zizka (APPG-3436)

**Chlorophytum orchidastrum** Lindl.

**Distribution:** Guineo-Congolian-Sudano-Zambesian

**Notes:** Life Form: hemicryptophyte; Voucher: Schmidt et al. (FR-0007465)

**Chlorophytum stenopetalum** Baker

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Nacoulma 4558 (OUA-17135)

**Drimia altissima** (L.f.) Ker Gawl.

**Nomenclature:**

*Urginea altissima* (L.f.) Baker

**Distribution:** Afrotropical

**Notes:** Life Form: hemicryptophyte

**Drimiopsis barteri** Baker

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70165); New species record for Burkina Faso.

**Eriospermum flagelliforme** (Baker) J.C.Manning

**Nomenclature:**

*Eriospermum* abyssinicum Baker

**Distribution:** Afrotropical

**Notes:** Life Form: geophyte; Voucher: Zwarg 52 (FR-25053)

**Ledebouria sudanica** (A.Chev.) Burg

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70170)
**Ornithogalum viride** (L.) J.C. Manning & Goldblatt

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: geophyte

**Sansevieria liberica** Gérôme & Labroy

**Distribution:** Guineo-Congolian-Sudano-Zambesian

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70343)

**Family Asteraceae**

**Acanthospermum hispidum** DC.

**Distribution:** Afro-Malagasy (introduced)

**Notes:** Life Form: therophyte; Voucher: Schmidt (APPG-4421)

**Aedesia glabra** (Klatt) O.Hoffm.

**Nomenclature:**

*Aedesia baumannii* O.Hoffm.

**Distribution:** Guineo-Congolian

**Notes:** Life Form: phanerophyte

**Ageratum conyzoides** L.

**Distribution:** Pantropical (introduced)

**Notes:** Life Form: therophyte

**Aspilia africana** (Pers.) C.D. Adams

**Distribution:** Guineo-Congolian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4578 (OUA-17161)

**Aspilia angustifolia** Oliv. & Hiern

**Distribution:** Sudanian

**Notes:** Life Form: therophyte
Aspilia bussei O.Hoffm. & Muschl.

Distribution: Sudanian

Notes: Life Form: therophyte; Voucher: Zwarg 17 (FR)

Aspilia helianthoides (Schumach. & Thonn.) Oliv. & Hiern

Distribution: Sudanian

Notes: Life Form: therophyte

Aspilia kotschyi (Sch.Bip. ex Hochst.) Oliv.

Distribution: Sudano-Zambesian

Notes: Life Form: therophyte

Aspilia paludosa Berhaut

Distribution: Sudanian

Notes: Life Form: therophyte; Voucher: Zwarg 71 (FR)

Aspilia rudis Oliv. & Hiern

Distribution: Sudanian

Notes: Life Form: therophyte; Voucher: Schmidt et al. (FR-0007429)

Bidens borianiana (Sch.Bip. ex Schweinf.) Cufod.

Distribution: Sudanian

Notes: Life Form: therophyte; Voucher: Nacoulma 97 (OUA-13461)

Bidens engleri O.E.Schulz

Distribution: Sudanian

Notes: Life Form: therophyte; Voucher: Nacoulma 4534 (OUA-17110)

Bidens pilosa L.

Distribution: Sudanian (introduced)

Notes: Life Form: therophyte
**Blumea crispa**ta (Vahl) Merxm.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 85 (OUA-13449)

**Blumea oloptera** DC.

**Nomenclature:**

Laggera oloptera (DC.) C.D.Adams

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte

**Chrysanthellum indicum** DC.

**Distribution:** Pantropical (introduced)

**Notes:** Life Form: therophyte

**Dicoma tomentosa** Cass.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte

**Linzia purpurea** (Sch.Bip. ex Walp.) Isawumi

**Nomenclature:**

Vernonia purpurea Sch.Bip. ex Walp.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 36 (OUA-13401)

**Macledium sessiliflorum** (Harv.) S.Ortiz

**Nomenclature:**

Dicoma sessiliflora Harv.

**Distribution:** Afrotropical

**Notes:** Life Form: hemicyryptophyte; Voucher: Nacoulma (APPG-70184)

**Melanthera elliptica** O.Hoffm.

**Distribution:** Sudanian
Notes: Life Form: hemicryptophyte; Voucher: Nacoulma 79 (OUA-13443)

*Melanthera scandens* (Schumach. & Thonn.) Roberty

*Distribution*: Afrotropical

Notes: Life Form: therophyte; Voucher: Nacoulma 4627 (OUA-17218)

*Pentanema indicum* (L.)

*Distribution*: Afrotropical

Notes: Life Form: therophyte

*Pseudognaphalium luteoalbum* (L.) Hilliard & B.L.Burtt

*Distribution*: Cosmopolitan

Notes: Life Form: therophyte; Voucher: Nacoulma (OUA-17193)

*Synedrella nodiflora* (L.) Gaertn.

*Distribution*: Pantropical

Notes: Life Form: therophyte; Voucher: Schumann (FR-0083332)

*Tridax procumbens* L.

*Distribution*: Pantropical (introduced)

Notes: Life Form: therophyte; Voucher: Schumann (FR-0083331)

*Vernonia colorata* (Willd.) Drake

*Distribution*: Sudano-Zambesian

Notes: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007421)

*Vernonia pumila* (Vell.) Cabrera

*Distribution*: Sudano-Zambesian

Notes: Life Form: therophyte
Family Bignoniaceae

*Kigelia africana* (Lam.) Benth.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 107 (OUA-13471)

*Stereospermum kunthianum* Cham.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Katharina Schumann (APPG-2499)

Family Bixaceae

*Cochlospermum planchonii* Hook.f. ex Planch.

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Zwarg 83 (FR)

*Cochlospermum tinctorium* Perrier ex A.Rich.

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-69817)

Family Boraginaceae

*Euploca strigosa* (Willd.) Diane & Hilger

**Nomenclature:**

*Heliotropium strigosum* Willd.

**Distribution:** Paleotropical

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 4476 (OUA-17054)

*Heliotropium indicum* L.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma (APPG-70063)
**Rotula aquatica** Lour.

*Distribution*: Pantropical

*Notes*: Life Form: phanerophyte; Voucher: Nacoulma (APPG-70332)

**Family Burseraceae**

**Boswellia dalzielii** Hutch.

*Distribution*: Sudanian

*Notes*: Life Form: phanerophyte

**Commiphora africana** (A.Rich.) Endl.

*Distribution*: Paleotropical

*Notes*: Life Form: phanerophyte

**Family Campanulaceae**

**Wahlenbergia hirsuta** (Edgew.) Tuyn

*Distribution*: Afro-American

*Notes*: Life Form: therophyte; Voucher: Schumann (FR-0083327)

**Family Cannabaceae**

**Trema orientalis** (L.) Blume

*Distribution*: Afro-Malagasy

*Notes*: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007626)

**Family Capparaceae**

**Boscia angustifolia** A.Rich.

*Distribution*: Sudanian

*Notes*: Life Form: phanerophyte; Voucher: Thiombiano et al. 3297 (OUA)

**Boscia senegalensis** Lam.

*Distribution*: Sudanian
Notes: Life Form: phanerophyte; Voucher: Nacoulma (APPG-69783)

**Cadaba farinosa Forssk**

*Distribution:* Paleotropical

*Notes:* Life Form: phanerophyte; Voucher: Erpenbach (APPG-29466)

**Capparis sepiaria L.**

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte

**Capparis tomentosa Lam.**

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte; Voucher: Katharina Schumann (APPG-4121)

**Crateva adansonii DC.**

*Distribution:* Paleotropical

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma 140 (OUA-13504)

**Maerua angolensis DC.**

*Distribution:* Afrotropical

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma (APPG-70194)

**Maerua oblongifolia (Forssk.) A.Rich.**

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma (APPG-70196)

**Ritchiea capparoides (Andrews) Britten**

*Distribution:* Guineo-Congolian

*Notes:* Life Form: phanerophyte; Voucher: Thiombiano et al. 3311 (OUA)
Family Caryophyllaceae

*Polycarpaea corymbosa* (L.) Lam.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Nacoulma 94 (OUA-13458)

*Polycarpaea eriantha* Hochst. ex A.Rich.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083322)

*Polycarpaea linearifolia* (DC.) DC.

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083321)

*Polycarpon prostratum* (Forssk.) Asch. & Schweinf.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma (OUA-17195)

Family Celastraceae

*Gymnosporia senegalensis* (Lam.) Loes.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 103 (FR)

*Loeseneriella africana* (Willd.) R.Wilczek

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 125 (OUA-13489)

Family Chrysobalanaceae

*Parinari congensis* Didr.

**Distribution:** Guineo-Congolian

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007622)
*Parinari curatellifolia* Planch. ex Benth.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70297)

**Family Cleomaceae**

*Cleome viscosa* L.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte

**Family Clusiaceae**

*Garcinia livingstonei* T.Anderson

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007444)

**Family Colchicaceae**

*Gloriosa simplex* L.

**Distribution:** Pluriregional African

**Notes:** Life Form: geophyte; Voucher: Nacoulma 214 (OUA-13577)

*Gloriosa superba* L.

**Distribution:** Paleotropical

**Notes:** Life Form: geophyte; Voucher: Nacoulma 27 (OUA-13393)

**Family Combretaceae**

*Anogeissus leiocarpa* (DC.) Guill. & Perr.

**Nomenclature:**

*Terminalia leiocarpa* (DC.) Baill.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007383)
**Combretum aculeatum** Vent.

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma (APPG-69837)

**Combretum adenogonium** Steud. ex A.Rich.

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte

**Combretum collinum** Fresen.

*Distribution:* Afrotropical

*Notes:* Life Form: phanerophyte; Voucher: Zwarg 16 (FR)

**Combretum glutinosum** Perr. ex DC.

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte; Voucher: Küppers 468 (FR-0011271)

**Combretum micranthum** G.Don

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte; Voucher: Zwarg 120 (FR)

**Combretum molle** R.Br. ex G.Don

*Distribution:* Afrotropical

*Notes:* Life Form: phanerophyte; Voucher: Zwarg 91 (FR)

**Combretum nigricans** Lepr. ex Guill. & Perr.

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte; Voucher: Zwarg 15 (FR)

**Combretum nioroense** Aubrèv. ex Keay

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma (APPG-69849)
Combretum paniculatum Vent.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69851)

Guiera senegalensis J.F.Gmel.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 79 (FR)

Pteleopsis suberosa Engl. & Diels

**Nomenclature:**
Terminalia engleri Gere & Boatwr.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 95 (FR)

Terminalia avicennioides Guill. & Perr.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Katharina Schumann (APPG-2595)

Terminalia laxiflora Engl.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 4539 (OUA-17106)

Terminalia macroptera Guill. & Perr.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 132 (FR)

Terminalia mollis M.A.Lawson

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte

Terminalia schimperiana Hochst. ex Delile

**Distribution:** Pantropical
Notes: Life Form: phanerophyte

Family Commelinaeaceae

_Aneilema lanceolatum_ Benth.

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: chamaephyte; Voucher: Nacoulma 4586 (OUA-17188)

_Aneilema paludosum_ A.Chev.

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: chamaephyte; Voucher: Nacoulma 4552 (OUA-17141)

_Aneilema setiferum_ A.Chev.

*Distribution*: Sudanian

*Notes*: Life Form: chamaephyte; Voucher: Nacoulma 4527 (OUA-17117)

_Commelina benghalensis_ L.

*Distribution*: Paleotropical

*Notes*: Life Form: therophyte

_Commelina erecta_ L.

*Distribution*: Pantropical

*Notes*: Life Form: therophyte; Voucher: Schmidt et al. (FR-0007618)

_Commelina forskalii_ Vahl

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: therophyte; Voucher: Nacoulma 195 (OUA-13558)

_Commelina nigritana_ Benth.

*Distribution*: Afrotropical

*Notes*: Life Form: therophyte; Voucher: Zwarg 31 (FR)
**Commelina subulata** Roth

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4495 (OUA-17071)

**Cyanotis caespitosa** Kotschy & Peyr.

**Distribution:** Afrotropical

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-69902)

**Cyanotis lanata** Benth.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte

**Cyanotis longifolia** Benth.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 232 (OUA-17225)

**Floscopa africana** (P.Beauv.) C.B.Clarke

**Distribution:** Pantropical

**Notes:** Life Form: geophyte

**Floscopa axillaris** (Poir.) C.B.Clarke

**Distribution:** Pantropical

**Notes:** Life Form: geophyte

**Murdannia simplex** (Vahl) Brenan

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007660)

**Family Convolvulaceae**

**Evolvulus alsinoides** (L.) L.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 101 (FR)
**Ipomoea aquatica** Forssk.

**Distribution:** Pantropical

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma (APPG-70073)

**Ipomoea argentaurata** Hallier f.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 106 (OUA-13470)

**Ipomoea barteri** A. Chev.

**Distribution:** Afro-American

**Notes:** Life Form: therophyte

**Ipomoea coptica** (L.) Roth ex Roem. & Schult.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 81 (OUA-13445)

**Ipomoea coscinosperma** Hochst. ex Choisy

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Nacoulma 31 (OUA-13396)

**Ipomoea eriocarpa** R. Br.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 91 (OUA-13455)

**Ipomoea heterotricha** Didr.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007482)

**Ipomoea vagans** Baker

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083311)
**Merremia hederacea** (Burm. f.) Hallier f.

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 4563 (OUA-17132)

**Merremia kentrocaulos** Rendle

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 60 (OUA-13425)

**Merremia pinnata** (Hochst. ex Choisy) Hallier f.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083310)

**Family Costaceae**

**Costus spectabilis** (Fenzl) K.Schum.

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Erpenbach (APPG-29559)

**Family Crassulaceae**

**Kalanchoe crenata** (Andrews) Haw.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma (APPG-70130)

**Kalanchoe lanceolata** (Forssk.) Pers.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: chamaephyte

**Family Cucurbitaceae**

**Citrullus lanatus** (Thunb.) Matsum. & Nakai

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte
**Cucumis maderaspatanus** L.

**Nomenclature:**
Mukia maderaspatana (L.) M.Roem.

**Distribution:** Paleotropical

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 32 (OUA-13397)

**Cucumis melo** L.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 41 (OUA-13406)

**Cucumis prophetarum** L.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Nacoulma (OUA-17154)

**Luffa cylindrica** (L.) M.Roem.

**Distribution:** Afro-American

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007582)

**Trochomeria macrocarpa** (Sond.) Harv.

**Distribution:** Afrotropical

**Notes:** Life Form: geophyte; Voucher: Nacoulma 59 (OUA-13424)

**Zehneria hallii** C.Jeffrey

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 66 (OUA-13431)

**Family Cyperaceae**

**Ascolepis protea** Welw.

**Distribution:** Afrotropical

**Notes:** Life Form: hemicryptophyte
Bulbostylis abortiva (Steud.) C.B.Clarke

Nomenclature:
Abildgaardia abortiva (Steud.) Lye

Distribution: Pluriregional African

Notes: Life Form: therophyte; Voucher: Zwarg 5 (FR-25005)

Bulbostylis cioniana (Pi.Savi) Lye

Distribution: Pluriregional African

Notes: Life Form: therophyte

Bulbostylis coleotricha (Hochst. ex A.Rich.) C.B.Clarke

Nomenclature:
Abildgaardia coleotricha (Hochst. ex A.Rich.) Lye

Distribution: Sudanian

Notes: Life Form: therophyte

Bulbostylis densa (Wall.) Hand.-Mazz.

Distribution: Pantropical

Notes: Life Form: therophyte

Bulbostylis filamentosa (Vahl) C.B.Clarke

Nomenclature:
Bulbostylis metralis Cherm.

Distribution: Afrotropical

Notes: Life Form: hemicryptophyte

Bulbostylis hispidula (Vahl) R.W.Haines

Nomenclature:
Abildgaardia hispidula (Vahl) Lye|Fimbristylis hispidula (Vahl) Kunth

Distribution: Pluriregional African

Notes: Life Form: therophyte; Voucher: Mbayngone et al. (FR-7485)
**Bulbostylis pilosa** (Willd.) Cherm.

**Nomenclature:**
Abildgaardia pilosa (Willd.) Nees

**Distribution:** Afrotropical

**Notes:** Life Form: hemicryptophyte

**Cyperus difformis** L.

**Distribution:** Pantropical

**Notes:** Life Form: hemicryptophyte

**Cyperus esculentus** L.

**Distribution:** Pantropical

**Notes:** Life Form: geophyte

**Cyperus haspan** L.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083305)

**Cyperus iria** L.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083303)

**Cyperus podocarpus** Boeckeler

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: hemicryptophyte

**Cyperus procerus** Rottb.

**Distribution:** Paleotropical

**Notes:** Life Form: geophyte

**Cyperus pustulatus** Vahl

**Distribution:** Sudano-Zambesian
Notes: Life Form: therophyte; Voucher: Schumann (FR-0083302)

*Cyperus reduncus* Hochst. ex Boeckeler

Distribution: Pantropical

Notes: Life Form: therophyte; Voucher: Schumann (FR-0083301)

*Cyperus rotundus* L.

Distribution: Afrotropical

Notes: Life Form: geophyte

*Cyperus tenuiculmis* Boeckeler

Distribution: Pantropical

Notes: Life Form: geophyte

*Diplacrum africanum* (Benth.) C.B.Clarke

Distribution: Afrotropical

Notes: Life Form: therophyte; Voucher: Nacoulma 111 (OUA-13475)

*Eleocharis atropurpurea* (Retz.) J.Presl & C.Presl

Distribution: Pantropical

Notes: Life Form: therophyte

*Eleocharis complanata* Boeckeler

Distribution: Guineo-Congolian-Sudano-Zambesian

Notes: Life Form: therophyte

*Eleocharis naumanniana* Boeckeler

Distribution: Guineo-Congolian-Sudano-Zambesian

Notes: Life Form: therophyte; Voucher: Schumann (FR-0083298); New species record for Burkina Faso.

*Fimbristylis dichotoma* (L.) Vahl

Distribution: Pantropical
**Fimbristylis ferruginea (L.) Vahl**

*Distribution:* Pantropical

*Notes:* Life Form: hemicryptophyte

**Fimbristylis pilosa Vahl**

*Distribution:* Sudanian

*Notes:* Life Form: hemicryptophyte; Voucher: Schumann (APPG-6708)

**Fuirena umbellata Rottb.**

*Distribution:* Afrotropical

*Notes:* Life Form: geophyte

**Kyllinga debilis C.B.Clarke**

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: therophyte

**Kyllinga erecta Schumach.**

*Distribution:* Afro-Malagasy

*Notes:* Life Form: geophyte; Voucher: Zwarg 7 (FR-25007)

**Kyllinga pumila Michx.**

*Distribution:* Afro-American

*Notes:* Life Form: hemicryptophyte

**Kyllinga squamulata Vahl**

*Distribution:* Pantropical

*Notes:* Life Form: therophyte; Voucher: Schumann 188 (FR-0083292)

**Kyllinga tenuifolia Steud.**

*Distribution:* Paleotropical

*Notes:* Life Form: hemicryptophyte
**Lipocarpha chinensis** (Osbeck) J.Kern

*Distribution*: Paleotropical

*Notes*: Life Form: therophyte

**Lipocarpha kernii** (Raymond) Goetgh.

*Distribution*: Paleotropical

*Notes*: Life Form: therophyte; Voucher: Zwarg 21 (FR)

**Mariscus cylindristachyus** Steud.

*Nomenclature*:  
**Mariscus alternifolius** Vahl

*Distribution*: Pantropical

*Notes*: Life Form: hemicyrptophyte; Voucher: Nacoulma 261 (OUA-17221)

**Mariscus squarrosus** (L.) C.B.Clarke

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: therophyte; Voucher: Zwarg 32 (FR)

**Pycreus macrostachyos** (Lam.) J.Raynal

*Distribution*: Pantropical

*Notes*: Life Form: therophyte; Voucher: Katharina Schumann (APPG-6710)

**Pycreus pumilus** (L.) Nees

*Distribution*: Paleotropical

*Notes*: Life Form: therophyte; Voucher: Zwarg 38 (FR)

**Rhynchospora corymbosa** (L.) Britton

*Distribution*: Pantropical

*Notes*: Life Form: hemicyrptophyte; Voucher: Schmidt et al. (FR-0007428)
**Schoenoplectiella senegalensis** (Steud.) Lye

**Nomenclature:**
Scirpus jacobii C.E.C. Fisch.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Thomas Janßen (APPG-5364)

---

**Scleria bulbifera** Hochst. ex A.Rich.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: geophyte; Voucher: Schumann (FR-0083289)

---

**Scleria melanotricha** Hochst. & A.Rich.

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte

---

**Scleria pergracilis** (Nees) Kunth

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte

---

**Scleria sphaerocarpa** (E.A.Rob.) Napper

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Zwarg 37 (FR)

---

**Scleria tessellata** Willd.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007401)

---

**Family Dioscoreaceae**

**Dioscorea bulbifera** L.

**Distribution:** Pantropical

**Notes:** Life Form: geophyte; Voucher: Nacoulma 198 (OUA-13561)
**Dioscorea dumetorum** (Kunth) Pax

*Distribution*: Pantropical

*Notes*: Life Form: geophyte; Voucher: Nacoulma (APPG-6817)

**Dioscorea hirtiflora** Benth.

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: geophyte; Voucher: Nacoulma (OUA-17127)

**Dioscorea sagittifolia** Pax

*Nomenclature:*

*Dioscorea lecardii* De Wild.

*Distribution*: Sudanian

*Notes*: Life Form: geophyte; Voucher: Nacoulma 63 (OUA-13428)

**Tacca leontopetaloides** (L.) Kuntze

*Distribution*: Paleotropical

*Notes*: Life Form: geophyte; Voucher: Georg Zizka (APPG-5658)

**Family Dipterocarpaceae**

**Monotes kerstingii** Gilg

*Distribution*: Sudanian

*Notes*: Life Form: phanerophyte; Voucher: Thiombiano et al. 3306 (OUA)

**Family Droseraceae**

**Drosera indica** L.

*Distribution*: Pantropical

*Notes*: Life Form: therophyte; Voucher: Nacoulma 231 (OUA-17070)
Family Ebenaceae

*Diospyros mespiliformis* Hochst. ex A.DC.

*Distribution*: Paleotropical

*Notes*: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007391)

Family Eriocaulaceae

*Eriocaulon afzelianum* Wikstr. ex Körn.

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: hydrophyte; Voucher: Schumann (FR-0083279)

*Eriocaulon nigericum* Meikle

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: therophyte

*Eriocaulon plumale* N.E.Br.

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: therophyte; Voucher: Schumann (FR-0083278)

Family Euphorbiaceae

*Acalypha ciliata* Forssk.

*Distribution*: Paleotropical

*Notes*: Life Form: therophyte

*Acalypha segetalis* Müll.Arg.

*Distribution*: Afrotropical

*Notes*: Life Form: therophyte; Voucher: Schumann (FR-0083275)

*Alchornea cordifolia* (Schumach. & Thonn.) Müll.Arg.

*Distribution*: Afrotropical

*Notes*: Life Form: phanerophyte; Voucher: Nacoulma 4489 (OUA-17077)
**Caperonia serrata (Turcz.) C.Presl**

Distribution: Sudanian

Notes: Life Form: therophyte

**Croton nigritanus Scott-Elliot**

Distribution: Guineo-Congolian

Notes: Life Form: phanerophyte; Voucher: Nacoulma 197 (OUA-13560)

**Euphorbia baga A.Chev.**

Distribution: Afrotropical

Notes: Life Form: geophyte; Voucher: Nacoulma (APPG-69981)

**Euphorbia convolvuloides Hochst. ex Benth.**

Distribution: Sudanian

Notes: Life Form: therophyte

**Euphorbia hirta L.**

Distribution: Pantropical

Notes: Life Form: therophyte

**Euphorbia poissoni Pax**

Distribution: Guineo-Congolian

Notes: Life Form: phanerophyte; Voucher: Nacoulma (APPG-69984)

**Euphorbia polycnemoides Hochst. ex Boiss.**

Distribution: Sudanian

Notes: Life Form: therophyte

**Jatropha atacorensis A.Chev.**

Distribution: Afrotropical

Notes: Life Form: geophyte; Voucher: Nacoulma (APPG-70120) ; New species record for Burkina Faso.
**Mallotus oppositifolius** (Geiseler) Müll.Arg.

*Distribution*: Pluriregional African

*Notes*: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007604)

**Tragia laminularis** Müll.Arg.

*Distribution*: Sudanian

*Notes*: Life Form: geophyte; Voucher: Nacoulma 4857 (OUA-17347); New species record for Burkina Faso.

**Tragia senegalensis** Müll.Arg.

*Distribution*: Sudanian

*Notes*: Life Form: phanerophyte; Voucher: Nacoulma (APPG-70400)

**Family Fabaceae**

**Abrus melanospermus** Hassk.

*Nomenclature*: 

*Abrus pulchellus* Wall. ex Thwaites

*Distribution*: Afrotropical

*Notes*: Life Form: chamaephyte; Voucher: Nacoulma 137 (OUA-13501)

**Abrus precatorius** L.

*Distribution*: Paleotropical

*Notes*: Life Form: phanerophyte; Voucher: Nacoulma 213 (OUA-13576)

**Acacia amythethophylla** Steud. ex A. Rich.

*Distribution*: Sudanian

*Notes*: Life Form: phanerophyte; Voucher: Nacoulma 4528 (OUA-17116)

**Acacia ataxacantha** DC.

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: phanerophyte
**Acacia dudgeonii** Craib ex Holland

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 93 (FR)

**Acacia erythrocalyx** Brenan

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69695)

**Acacia gerrardii** Benth.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 4518 (OUA-17083)

**Acacia gourmaensis** A. Chev.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte

**Acacia hockii** De Wild.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 99 (FR)

**Acacia macrostachya** Reichenb. ex DC.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 67 (FR)

**Acacia nilotica** (L.) Willd. ex Delile

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69704)

**Acacia polyacantha** Willd.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte
**Acacia senegal** (L.) Willd.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte

**Acacia seyal** Delile

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Erpenbach (APPG-26909)

**Acacia sieberiana** DC.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte

**Adenodolichos paniculatus** (Hua) Hutch. & Dalziel

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 167 (OUA-13531)

**Aeschynomene afraspera** J.Léonard

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte

**Aeschynomene americana** L.

**Distribution:** Cosmopolitan

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007492); New species record for Burkina Faso.

**Aeschynomene indica** L.

**Distribution:** Paleotropical

**Notes:** Life Form: chamaephyte

**Aeschynomene sensitiva** Sw.

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte
Aeschynomene tambacoundensis Berhaut

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte

Afzelia africana Sm.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69718)

Albizia chevalieri Harms

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 113 (FR)

Albizia malacophylla (A.Rich.)Walp.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 138 (OUA-13502)

Alysicarpus glumaceus (Vahl) DC.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte

Alysicarpus ovalifolius (Schumach.) J. Léonard

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 115 (FR)

Alysicarpus rugosus (Willd.) DC.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: therophyte

Alysicarpus vaginalis (L.) DC.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 181 (OUA-13544); New species record for Burkina Faso.
Andira inermis (Wright) DC.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte

Bobgunnia madagascariensis (Desv.) J.H.Kirkbr. & Wiersema

**Nomenclature:**
Swartzia madagascariensis Desv.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69771)

Burkea africana Hook.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 81 (FR)

Cajanus kerstingii Harms

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: chamaephyte

Cassia absus L.

**Distribution:** Paleotropical

**Notes:** Life Form: chamaephyte; Voucher: Zwarg 23 (FR)

Cassia mimosoides L.

**Nomenclature:**
Chamaecrista pratensis (R.Vig.) Du Puy

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 13 (FR)

Cassia nigricans Vahl

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte
**Cassia obtusifolia** L.

**Distribution:** Pantropical (introduced)

**Notes:** Life Form: therophyte

**Cassia sieberiana** DC.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 56 (FR)

**Cassia singueana** Delile

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte

**Crotalaria barkae** Schweinf.

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 29 (OUA-13394)

**Crotalaria calycina** Schrank

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 89 (OUA-13453)

**Crotalaria cephalotes** A.Rich.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte

**Crotalaria comosa** Baker

**Distribution:** Guineo-Congolian-Sudano-Zambesian

**Notes:** Life Form: therophyte

**Crotalaria glauca** Willd.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 55 (OUA-13420)
**Crotalaria goreensis** Guill. & Perr.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Zwarg 134 (FR)

**Crotalaria hyssopifolia** Klotzsch

**Distribution:** Guineo-Congolian-Sudano-Zambesian

**Notes:** Life Form: chamaephyte; Voucher: Schumann (FR-0083259)

**Crotalaria lachnophora** A.Rich.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4890 (OUA-17359); New species record for Burkina Faso.

**Crotalaria lathyroides** Guill. & Perr.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte

**Crotalaria leprieurii** Guill. & Perr.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Zwarg 35 (FR)

**Crotalaria macrocalyx** Benth.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 7 (OUA-13377)

**Crotalaria microcarpa** Hochst. ex Benth.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte

**Crotalaria naragutensis** Hutch.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007647)
Crotalaria pallida Aiton

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 77 (OUA-13441)

Crotalaria podocarpa DC.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte

Crotalaria retusa L.

**Distribution:** Pantropical

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma (APPG-69877)

Crotalaria senegalensis (Pers.) Bacle ex DC.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 163 (OUA-13527)

Daniellia oliveri (Rolfe)Hutch. & Dalziel

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte

Desmodium adscendens (Sw.) DC.

**Distribution:** Paleotropical (introduced)

**Notes:** Life Form: chamaephyte; Voucher: Zwarg 50 (FR)

Desmodium gangeticum (L.)DC.

**Distribution:** Paleotropical

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 144 (OUA-13508)

Desmodium hirtum Guill. & Perr.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 221 (OUA-13583)
**Desmodium ospriostreblum Steud. ex A. Rich.**

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 72 (OUA-13436)

**Desmodium ramosissimum G.Don**

**Distribution:** Afro-Malagasy

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 5310 (OUA-17810); New species record for Burkina Faso.

**Desmodium setigerum (E.Mey.)Harv.**

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 5 (OUA-13375)

**Desmodium velutinum (Willd.) DC.**

**Distribution:** Pantropical

**Notes:** Life Form: chamaephyte; Voucher: Schmidt et al. (FR-0007423)

**Detarium microcarpum Guill. & Perr.**

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zizka (APPG-5662)

**Dichrostachys cinerea (L.) Wight & Arn.**

**Distribution:** Pantropical

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 130 (FR)

**Entada africana Guill. & Perr.**

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 89 (FR)

**Eriosema psoraloides (Lam.) G.Don**

**Distribution:** Pantropical

**Notes:** Life Form: chamaephyte
**Erythrina senegalensis DC.**

**Distribution:** Guineo-Congolian-Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69951)

**Indigofera bracteolata DC.**

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 78 (OUA-13442)

**Indigofera congoensis De Wild. & T.Durand**

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 26 (FR)

**Indigofera dendroides Jacq.**

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 30 (OUA-13395)

**Indigofera garckeana Vatke**

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma (APPG-70072); New species record for Burkina Faso.

**Indigofera geminata Baker**

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Zwarg 11 (FR)

**Indigofera hirsuta L.**

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4635 (OUA-17191)

**Indigofera kerstingii Harms**

**Distribution:** Guineo-Congolian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 236 (OUA-17224)
**Indigofera leprieurii Baker f.**

*Distribution*: Sudanian

*Notes*: Life Form: therophyte

**Indigofera macrocalyx Guill. & Perr.**

*Distribution*: Sudanian

*Notes*: Life Form: therophyte; Voucher: Schmidt et al. (FR-0007484)

**Indigofera microcarpa Desv.**

*Distribution*: Afro-Malagasy (introduced)

*Notes*: Life Form: therophyte

**Indigofera nummulariifolia (L.) Alston**

*Distribution*: Pluriregional African

*Notes*: Life Form: therophyte; Voucher: Schumann (FR-0083355)

**Indigofera paniculata Pers.**

*Distribution*: Afrotropical

*Notes*: Life Form: therophyte; Voucher: Schmidt et al. (FR-0007381)

**Indigofera polysphaera Baker**

*Distribution*: Sudanian

*Notes*: Life Form: phanerophyte; Voucher: Schumann (FR-0083243)

**Indigofera pulchra Willd.**

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: therophyte

**Indigofera secundiflora Poir.**

*Distribution*: Paleotropical

*Notes*: Life Form: chamaephyte
*Indigofera senegalensis* Lam.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 42 (OUA-13407)

*Indigofera simplicifolia* Lam.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 43 (OUA-13408)

*Indigofera stenophylla* Guill. & Perr.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Zwarg 59 (FR)

*Indigofera tinctoria* L.

**Distribution:** Paleotropical

**Notes:** Life Form: chamaephyte; Voucher: Schumann (FR-0083240)

*Indigofera trita* L.f.

**Nomenclature:**

*Indigofera subulata* Vahl ex Poir.

**Distribution:** Afrotropical

**Notes:** Life Form: chamaephyte

*Isoberlinia doka* Craib & Stapf

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 128 (FR)

*Macrotyloma biflorum* (Schumach. & Thonn.) Hepper

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Nacoulma 68 (OUA-13432)

*Melliniella micrantha* Harms

**Distribution:** Sudanian
Notes: Life Form: therophyte; Voucher: Zwarg 24 (FR)

*Mimosa pigra* L.

Distribution: Pantropical

Notes: Life Form: phanerophyte; Voucher: Nacoulma (APPG-70218)

*Neptunia oleracea* Lour.

Distribution: Pantropical

Notes: Life Form: hydrophyte; Voucher: Georg Zizka (APPG-3861)

*Parkia biglobosa* (Jacq.)G.Don

Distribution: Paleotropical

Notes: Life Form: phanerophyte; Voucher: Schumann (APPG-2030)

*Pericopsis laxiflora* (Baker)Meeuwen

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Nacoulma 10 (OUA-13380)

*Philenoptera laxiflora* (Guill. & Perr.)Roberty

Distribution: Pluriregional African

Notes: Life Form: phanerophyte; Voucher: Schumann (APPG-1663)

*Piliostigma reticulatum* (DC.)Hochst.

Distribution: Sudanian

Notes: Life Form: phanerophyte

*Piliostigma thonningii* (Schum.)Milne-Redh.

Distribution: Afrotropical

Notes: Life Form: phanerophyte; Voucher: Schumann (APPG-2124)

*Prosopis africana* (Guill. & Perr.)Taub.

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Zwarg 96 (FR)
**Pterocarpus erinaceus** Poir.

Distribution: Sudano-Zambesian

Notes: Life Form: phanerophyte; Voucher: Zwarg 133 (FR)

**Rhynchosia densiflora** (Roth)DC.

Distribution: Paleotropical

Notes: Life Form: therophyte; Voucher: Nacoulma 188 (OUA-13551)

**Rhynchosia minima** (L.) DC.

Distribution: Pantropical

Notes: Life Form: therophyte; Voucher: Nacoulma 56 (OUA-13421)

**Rhynchosia nyasica** Baker

Distribution: Sudano-Zambesian

Notes: Life Form: chamaephyte; Voucher: Schumann (FR-0083236)

**Rhynchosia sublobata** (Schum.)Meikle

Distribution: Pluriregional African

Notes: Life Form: chamaephyte

**Sesbania sesban** (L.) Fawc. & Rendle

Distribution: Paleotropical

Notes: Life Form: phanerophyte

**Stylosanthes erecta** P.Beauv.

Distribution: Afrotropical

Notes: Life Form: chamaephyte; Voucher: Zwarg 114 (FR)

**Tamarindus indica** L.

Distribution: Pantropical

Notes: Life Form: phanerophyte; Voucher: Schumann (APPG-2554)
**Tephrosia bracteolata** Guill. & Perr.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Zwarg 63 (FR)

**Tephrosia elegans** Schumach.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 53 (OUA-13418)

**Tephrosia gracilipes** Guill. & Perr.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte

**Tephrosia humilis** Guill. & Perr.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte

**Tephrosia linearis** (Willd.)Pers.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: therophyte; Voucher: Nacoulma 103 (OUA-13467)

**Tephrosia nana** Schweinf.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007624)

**Tephrosia pedicellata** Baker

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Georg Zizka (APPG-3897)

**Tephrosia platycarpa** Guill. & Perr.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Zwarg 74 (FR)
**Teramnus labialis** (L.f.) Spreng.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007466)

**Uraria picta** (Jacq.) Desv.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma (APPG-70403)

**Vigna filicaulis** Hepper

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083229)

**Vigna gracilis** (Guill. & Perr.) Hook.f.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4511 (OUA-17090)

**Vigna heterophylla** A.Rich.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 37 (OUA-13402)

**Vigna nigritia** Hook.f.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4526 (OUA-17118); New species record for Burkina Faso.

**Vigna racemosa** (G.Don) Hutch. & Dalziel

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 218 (OUA-13580)

**Vigna reticulata** Hook.f.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte
**Vigna vexillata** (L.) A.Rich.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007386)

**Xeroderris stuhlmannii** (Taub.) Mendonça & E.C. Sousa

**Nomenclature:**
*Aganope stuhlmannii* (Taub.) Adema

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70437)

**Zornia glochidiata** DC.

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 41 (FR)

**Family Gentianaceae**

**Canscora diffusa** (Vahl) R.Br. ex Roem. & Schult.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 105 (OUA-13469)

**Faroa pusilla** Baker

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4535 (OUA-17241)

**Family Hydrocharitaceae**

**Ottelia ulvifolia** (Planch.) Walp.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007433)
Family Hydroleaceae

*Hydrolea macrosepala* A.W. Benn.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte

Family Hypericaceae

*Psorospermum glaberrimum* Hochr.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte

Family Hypoxidaceae

*Curculigo pilosa* (Schumach. & Thonn.) Engl.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-69892)

Family Iridaceae

*Gladiolus dalenii* Van Geel

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: geophyte; Voucher: Nacoulma 26 (OUA-13392)

*Gladiolus gregarius* Welw. ex Baker

**Nomenclature:**

*Gladiolus* klattianus Hutch.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: geophyte; Voucher: Nacoulma 69 (OUA-13433)

*Gladiolus unguiculatus* Baker

**Distribution:** Pluriregional African

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70039); New species record for Burkina Faso.
Family Isoetaceae

*Isoetes nigritiana* A. Braun

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: hemicryptophyte

Family Lamiaceae

*Aeollanthus pubescens* Benth.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083218)

*Clerodendrum capitatum* (Willd.) Schumach. & Thonn.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zizka (APPG-5665)

*Gmelina arborea* Roxb.

**Distribution:** Cultivated

**Notes:** Life Form: phanerophyte

*Hoslundia opposita* Vahl

**Distribution:** Afro-Malagasy

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 238 (OUA-17236)

*Hyptis spicigera* Lam.

**Distribution:** Pantropical (introduced)

**Notes:** Life Form: therophyte; Voucher: Zwarg 18 (FR)

*Hyptis suaveolens* (L.) Poit.

**Distribution:** Pantropical (introduced)

**Notes:** Life Form: therophyte
**Lantana ukambensis** (Vatke) Verdc.

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70160)

**Leonotis nepetifolia** (L.) R.Br.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007627)

**Leucas martinicensis** (Jacq.) R.Br.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte

**Lippia chevalieri** Moldenke

**Distribution:** Sudanian

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70181)

**Ocimum americanum** L.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083214)

**Platostoma africanum** P.Beauv.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Zwarg 84 (FR)

**Plectranthus gracillimus** (T.C.E.Fr.) Hutch. & Dandy

**Nomenclature:**
Englerastrum gracillimum T.C.E.Fr.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte
*Plectranthus monostachyus* (P.Beauv.) B.J.Pollard

**Nomenclature:**
*Solenostemon monostachyus* (P.Beauv.) Briq.

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083212)

*Tinnea barteri* Gürke

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 80 (OUA-13444)

*Vitex chrysocarpa* Planch.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 47 (OUA-13412)

*Vitex doniana* Sweet

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70433)

*Vitex madiensis* Oliv.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Katharina Schumann (APPG-2848)

Family Lentibulariaceae

*Utricularia inflexa* Forssk.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4488 (OUA-17066)

*Utricularia stellaris* L.f.

**Distribution:** Paleotropical

**Notes:** Life Form: hydrophyte; Voucher: Zizka (APPG-3900)
Family Linderniaceae

*Lindernia exilis* Philcox

Nomenclature:
*Ilysanthes gracilis* Skan

Distribution: Sudanian

Notes: Life Form: therophyte

Family Loganiaceae

*Strychnos innocua* Delile

Distribution: Sudano-Zambesian

Notes: Life Form: phanerophyte; Voucher: Nacoulma (APPG-70379)

*Strychnos spinosa* Lam.

Distribution: Afro-Malagasy

Notes: Life Form: phanerophyte; Voucher: Katharina Schumann (APPG-2530)

Family Loranthaceae

*Agelanthus dodoneifolius* (DC.) Polhill & Wiens

Nomenclature:
*Tapinanthus dodoneifolius* (DC.) Danser

Distribution: Sudanian

Notes: Life Form: epiphyte

*Tapinanthus bangwensis* (Engl. & K.Krause) Danser

Distribution: Guineo-Congolian

Notes: Life Form: epiphyte; Voucher: Nacoulma (APPG-6855)

*Tapinanthus globiferus* (A.Rich.) Tiegh.

Distribution: Afrotropical

Notes: Life Form: phanerophyte
Family Lythraceae

*Ammannia auriculata* Willd.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007399)

*Ammannia baccifera* L.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4485 (OUA-17063)

*Ammannia senegalensis* Lam.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte

*Rotala stagnina* Hiern

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 4486 (OUA-17064)

Family Malvaceae

*Abutilon pannosum* (G.Forst.) Schltdl.

**Distribution:** Paleotropical

**Notes:** Life Form: chamaephyte; Voucher: Schumann (FR-0083206)

*Abutilon ramosum* (Cav.) Guill. & Perr.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: chamaephyte

*Adansonia digitata* L.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69709)
**Bombax costatum** Pellegr. & Vuillet

*Distribution:* Sudanian

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma (APPG-69773)

**Cienfuegosia heteroclada** Sprague

*Distribution:* Sudanian

*Notes:* Life Form: chamaephyte; Voucher: Nacoulma 83 (OUA-13447)

**Cola laurifolia** Mast.

*Distribution:* Guineo-Congolian-Sudano-Zambesian

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma 132 (OUA-13496)

**Corchorus fascicularis** Lam.

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte; Voucher: Nacoulma 196 (OUA-13559)

**Corchorus olitorius** L.

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte

**Corchorus tridens** L.

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte; Voucher: Nacoulma 40 (OUA-13405)

**Dombeya quinqueseta** (Delile) Exell

*Distribution:* Afrotropical

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma (APPG-6818)

**Grewia barteri** Burret

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: phanerophyte; Voucher: Nacoulma (APPG-70052)
**Grewia bicolor** Juss.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Schumann (APPG-1370)

**Grewia cissoides** Hutch. & Dalziel

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Zwarg 122 (FR)

**Grewia flavescens** Juss.

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 179 (OUA-13542)

**Grewia lasiodiscus** K.Schum.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 109 (FR)

**Grewia mollis** Juss.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 200 (OUA-13563)

**Grewia villosa** Willd.

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70059)

**Hibiscus cannabinus** L.

**Nomenclature:**

*Hibiscus asper* Hook.f.

**Distribution:** Cultivated

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007392)

**Hibiscus congestiflorus** Hochr.

**Distribution:** Sudanian
Notes: Life Form: therophyte

Hibiscus physaloides Guill. & Perr.

Distribution: Sudanian
Notes: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007629)

Hibiscus squamosus Hochr.

Distribution: Pantropical
Notes: Life Form: therophyte; Voucher: Nacoulma 34 (OUA-13399)

Kosteletzkya buettneri Gürke

Distribution: Sudano-Zambesian
Notes: Life Form: phanerophyte; Voucher: Nacoulma (OUA-17144)

Melochia corchorifolia L.

Distribution: Paleotropical
Notes: Life Form: chamaephyte

Sida acuta Burm.f.

Distribution: Pantropical
Notes: Life Form: chamaephyte; Voucher: Katharina Schumann (APPG-3885)

Sida alba Cav.

Distribution: Pantropical
Notes: Life Form: therophyte; Voucher: Zwarg 48 (FR)

Sida linifolia Juss. ex Cav.

Distribution: Afro-American
Notes: Life Form: therophyte; Voucher: Schumann (FR-0083202)

Sida rhombifolia L.

Distribution: Pantropical
Notes: Life Form: chamaephyte; Voucher: Nacoulma 82 (OUA-13446)
**Sida urens** L.

- **Distribution:** Pantropical
- **Notes:** Life Form: therophyte; Voucher: Nacoulma 44 (OUA-13409)

**Sterculia setigera** Delile

- **Distribution:** Afrotropical
- **Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007476)

**Triumfetta rhomboidea** Jacq.

- **Distribution:** Pantropical
- **Notes:** Life Form: chamaephyte; Voucher: Zwarg 20 (FR)

**Waltheria indica** L.

- **Distribution:** Pantropical
- **Notes:** Life Form: chamaephyte; Voucher: Zwarg 19 (FR)

**Wissadula rostrata** (Schumach. & Thonn.) Planch.

- **Nomenclature:**
  - *Wissadula amplissima* (L.) R.E.Fr.
- **Distribution:** Afro-American
- **Notes:** Life Form: phanerophyte; Voucher: Zwarg 22 (FR)

**Family Marantaceae**

**Thalia geniculata** L.

- **Distribution:** Pluriregional African
- **Notes:** Life Form: geophyte; Voucher: Schmidt et al. (FR-0007382)

**Family Marsileaceae**

**Marsilea minuta** L.

- **Distribution:** Afro-Malagasy
- **Notes:** Life Form: hemicryptophyte
Marsilea polycarpa Hook. & Grev.

Distribution: Pantropical

Notes: Life Form: hemicryptophyte; Voucher: Nacoulma 4510 (OUA-17091)

Family Martyniaceae

Martynia annua L.

Distribution: Pluriregional African (introduced)

Notes: Life Form: therophyte; Voucher: Zizka (APPG-3856)

Family Meliaceae

Azadirachta indica A.Juss.

Distribution: Paleotropical (introduced)

Notes: Life Form: phanerophyte

Khaya senegalensis (Desv.) A.Juss.

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Zwarg 104 (FR)

Pseudocedrela kotschyi (Schweinf.) Harms

Distribution: Sudanian

Notes: Life Form: phanerophyte

Trichilia emetica Vahl

Distribution: Pantropical

Notes: Life Form: phanerophyte

Family Molluginaceae

Glinus lotoides L.

Distribution: Pantropical

Notes: Life Form: hemicryptophyte; Voucher: Nacoulma 176 (OUA-13540)
Mollugo nudicaulis Lam.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte

Family Moraceae

Ficus abutilifolia (Miq.) Miq.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007478)

Ficus asperifolia Miq.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte

Ficus glumosa Delile

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 125 (FR)

Ficus ingens (Miq.) Miq.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 161 (OUA-13525)

Ficus platyphylla Delile

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-69996)

Ficus sur Forsk.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte

Ficus sycomorus L.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte
Family Myrtaceae

*Syzgium guineense* (Willd.) DC.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Vouchernomenc: Nacoulma 152 (OUA-13516)

Family Nyctaginaceae

*Boerhavia erecta* L.

**Distribution:** Cosmopolitan

**Notes:** Life Form: therophyte; Voucher: Nacoulma 174 (OUA-13538)

Family Nymphaeaceae

*Nymphaea lotus* L.

**Distribution:** Paleotropical

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70246)

*Nymphaea maculata* Schumach. & Thonn.

**Distribution:** Afro-American

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70253)

*Nymphaea micrantha* Guill. & Perr.

**Distribution:** Guineo-Congolian-Sudano-Zambesian

**Notes:** Life Form: geophyte; Voucher: Nacoulma 205 (OUA-13568)

Family Ochnaceae

*Ochna schweinfurthiana* F.Hoffm.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 15 (OUA-13386)
Family Oleaceae

*Jasminum obtusifolium* Baker

- **Distribution:** Sudanian
- **Notes:** Life Form: phanerophyte

Family Onagraceae

*Ludwigia erecta* (L.) H.Hara

- **Distribution:** Afro-Malagasy (introduced)
- **Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083198)

*Ludwigia hyssopifolia* (G.Don) Exell

- **Distribution:** Sudanian
- **Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083197)

*Ludwigia octovalvis* (Jacq.) P.H.Raven

- **Distribution:** Pluriregional African
- **Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083245)

Family Ophioglossaceae

*Ophioglossum costatum* R. Br.

- **Distribution:** Sudano-Zambesian
- **Notes:** Life Form: geophyte; Voucher: Nacoulma 246 (OUA-17234)

*Ophioglossum reticulatum* L.

- **Distribution:** Pantropical
- **Notes:** Life Form: geophyte; Voucher: Zizka (APPG-3435)

*Ophioglossum thomasii* R.T. Clausen

- **Distribution:** Sudano-Zambesian
Notes: Life Form: geophyte; Voucher: Nacoulma 230 (OUA-17238); New species record for Burkina Faso.

Family Opiliaceae

*Opilia amentacea* Roxb.

Distribution: Paleotropical

Notes: Life Form: phanerophyte; Voucher: Nacoulma (APPG-70274)

Family Orchidaceae

*Eulophia cucullata* (Afzel. ex Sw.) Steud.

Distribution: Sudanian

Notes: Life Form: geophyte; Voucher: Nacoulma (APPG-69956)

*Eulophia guineensis* Lindl.

Distribution: Guineo-Congolian

Notes: Life Form: geophyte; Voucher: Nacoulma (APPG-69975)

*Habenaria longirostris* Summerh.

Distribution: Sudanian

Notes: Life Form: geophyte; Voucher: Schmidt (APPG-3361)

*Nervilia bicarinata* (Blume) Schltr.

Distribution: Afro-Malagasy

Notes: Life Form: geophyte; Voucher: Nacoulma (APPG-70240)

Family Orobanchaceae

*Buchnera hispida* Buch.-Ham. ex D.Don

Distribution: Sudanian

Notes: Life Form: therophyte; Voucher: Zwarg 110 (FR)
Micrargeria filiformis (Schumach. & Thonn.) Hutch. & Dalziel

Distribution: Sudanian
Notes: Life Form: therophyte

Rhamphicarpa fistulosa (Hochst.) Benth.

Distribution: Pluriregional African
Notes: Life Form: therophyte; Voucher: Schumann (FR-0083126)

Sopubia ramosa (Hochst.) Hochst.

Distribution: Afrotropical
Notes: Life Form: phanerophyte

Striga asiatica (L.) Kuntze

Distribution: Paleotropical
Notes: Life Form: therophyte; Voucher: Zwarg 3 (FR)

Striga aspera Benth.

Distribution: Sudano-Zambesian
Notes: Life Form: chamaephyte; Voucher: Zwarg 6 (FR)

Striga baumannii Engl.

Distribution: Afrotropical
Notes: Life Form: hemicryptophyte; Voucher: Nacoulma 4544 (OUA-17150)

Striga brachycalyx Skan

Distribution: Sudano-Zambesian
Notes: Life Form: chamaephyte; Voucher: Schumann (FR-0083125)

Striga forbesii Benth.

Distribution: Afrotropical
Notes: Life Form: therophyte
**Striga gesnerioides** (Willd.) Vatke

*Distribution*: Paleotropical

*Notes*: Life Form: chamaephyte

**Striga hermonthica** (Delile) Benth.

*Distribution*: Afro-Malagasy

*Notes*: Life Form: chamaephyte; Voucher: Nacoulma 4576 (OUA-17163)

**Striga klingii** (Engl.) Skan

*Distribution*: Paleotropical

*Notes*: Life Form: therophyte; Voucher: Nacoulma 4531 (OUA-17113)

**Striga macrantha** (Benth.) Benth.

*Distribution*: Pluriregional African

*Notes*: Life Form: therophyte; Voucher: Nacoulma 4483 (OUA-17061)

**Striga passargei** Engl.

*Distribution*: Sudano-Zambesian

*Notes*: Life Form: therophyte; Voucher: Schumann (FR-0083124)

**Family Oxalidaceae**

**Biophytum umbraculum** Welw.

*Distribution*: Paleotropical

*Notes*: Life Form: therophyte; Voucher: Nacoulma 4606 (OUA-17170)

**Family Passifloraceae**

**Passiflora foetida** L.

*Distribution*: Pantropical (introduced)

*Notes*: Life Form: phanerophyte; Voucher: Katharina Schumann (APPG-2045)
*Tricliceras pilosum* (Willd.) R.Fern.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Katharina Schumann (APPG-5700)

**Family Pedaliaceae**

*Ceratotheca sesamoides* Endl.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma (APPG-69793)

**Family Phyllanthaceae**

*Antidesma venosum* E.Mey. ex Tul.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007657)

*Bridelia ferruginea* Benth.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte

*Bridelia scleroneura* Müll.Arg.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 123 (FR)

*Flueggea virosa* (Roxb. ex Willd.) Royle

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 86 (FR)

*Hymenocardia acida* Tul.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007427)
**Margaritaria discoidea** (Baill.) G.L.Webster

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 92 (OUA-13456)

**Phyllanthus amarus** Schumach. & Thonn.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 53 (FR)

**Family Piperaceae**

**Peperomia pellucida** (L.) Kunth

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma (APPG-70317)

**Family Plantaginaceae**

**Bacopa crenata** (P.Beauv.) Hepper

**Distribution:** Afro-Malagasy

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4621 (OUA-17203)

**Bacopa floribunda** (R.Br.) Wettst.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 258 (OUA-17217)

**Bacopa hamiltoniana** (Benth.) Wettst.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Küppers 464 (FR-0035808)

**Dopatrium longidens** Skan

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 58 (OUA-13423)
Dopatrium senegalense Benth.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Nacoulma (APPG-69943)

Scoparia dulcis L.

**Distribution:** Pluriregional African (introduced)

**Notes:** Life Form: therophyte

Family Plumbaginaceae

Plumbago zeylanica L.

**Distribution:** Paleotropical (introduced)

**Notes:** Life Form: phanerophyte; Voucher: Schumann (FR-0083193)

Family Poaceae

Acroceras amplexens Stapf

**Distribution:** Pluriregional African

**Notes:** Life Form: chamaephyte

Acroceras zizanioides (Kunth) Dandy

**Distribution:** Pantropical

**Notes:** Life Form: chamaephyte

Anadelphia afzeliana (Rendle) Stapf

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 4548 (OUA-17146)

Andropogon chinensis (Nees) Merr.

**Nomenclature:**

Andropogon ascinodis C.B. Clarke

**Distribution:** Paleotropical

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 4516 (OUA-17085)
Andropogon fastigiatus Sw.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 46 (FR)

Andropogon gayanus Kunth

**Distribution:** Sudanian

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 4610 (OUA-17166)

Andropogon pseudapricus Stapf

**Distribution:** Afro-American

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4537 (OUA-17108)

Andropogon schirensis Hochst.

**Distribution:** Pluriregional African

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 182 (OUA-13545)

Andropogon tectorum Schumach. & Thonn.

**Distribution:** Sudanian

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 4501 (OUA-17100)

Aristida adscensionis L.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte

Aristida hordeacea Kunth

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte

Aristida kerstingii Pilg.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma 4581 (OUA-17158)
**Brachiaria deflexa** (Schumach.) C.E.Hubb. ex Robyns

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte

**Brachiaria falcifera** (Trin. ex Nees) Stapf

*Distribution:* Sudanian

*Notes:* Life Form: hemicryptophyte; Voucher: Schumann (FR-0083189)

**Brachiaria lata** (Schumach.) C.E.Hubb.

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte

**Brachiaria serrata** (Thunb.) Stapf

*Distribution:* Afrotropical

*Notes:* Life Form: hemicryptophyte; Voucher: Nacoulma (OUA-17186)

**Brachiaria stigmatisata** (Mez) Stapf

*Distribution:* Sudanian

*Notes:* Life Form: therophyte; Voucher: Schumann (FR-0083187)

**Brachiaria villosa** (Lam.) A.Camus

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte; Voucher: Zwarg 27 (FR)

**Chasmopodium caudatum** (Hack.) Stapf

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: therophyte

**Chloris gayana** Kunth

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: therophyte; Voucher: Nacoulma (OUA-17319); New species record for Burkina Faso
Chloris pilosa Schumach. & Thonn.
Distribution: Sudano-Zambesian
Notes: Life Form: therophyte

Chrysopogon nigritanus (Benth.) Veldkamp
Distribution: Sudano-Zambesian
Notes: Life Form: hemicryptophyte

Ctenium elegans Kunth
Distribution: Sudanian
Notes: Life Form: therophyte; Voucher: Zwarg 1 (FR)

Ctenium newtonii Hack.
Distribution: Afrotropical
Notes: Life Form: hemicryptophyte

Ctenium villosum Berhaut
Distribution: Sudanian
Notes: Life Form: therophyte; Voucher: Küppers 458 (FR-0015111)

Cymbopogon caesius (Nees ex Hook. & Arn.) Stapf
Distribution: Afrotropical
Notes: Life Form: hemicryptophyte; Voucher: Schmidt et al. (FR-0007430)

Cymbopogon schoenanthus (L.) Spreng.
Distribution: Pantropical
Notes: Life Form: hemicryptophyte; Voucher: Nacoulma 4599 (OUA-17177)

Cynodon dactylon (L.) Pers.
Distribution: Sudano-Zambesian
Notes: Life Form: hemicryptophyte
*Digitaria gayana* (Kunth) A.Chev.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 44 (FR)

*Digitaria horizontalis* Willd.

**Distribution:** Afrotropical

**Notes:** Life Form: therophyte

*Diheteropogon amplexens* (Nees) Clayton

**Distribution:** Pantropical

**Notes:** Life Form: hemicryptophyte

*Echinochloa colona* (L.) Link

**Distribution:** Pantropical

**Notes:** Life Form: therophyte

*Echinochloa pyramidalis* (Lam.) Hitchc. & Chase

**Distribution:** Afro-American

**Notes:** Life Form: hemicryptophyte; Voucher: Schmidt et al. (FR-0007578)

*Echinochloa stagnina* (Retz.) P.Beauv.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007406)

*Eleusine indica* (L.) Gaertn.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083175)

*Elionurus ciliaris* Kunth

**Nomenclature:**

*Elionurus* pobeguinii Stapf

**Distribution:** Sudanian
Notes: Life Form: hemicryptophyte; Voucher: Nacoulma (OUA-17123)

*Elionurus elegans* Kunth

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte

*Elymandra androphila* (Stapf) Stapf

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: hemicryptophyte

*Elytrophorus spicatus* (Willd.) A.Camus

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007405)

*Eragrostis amabilis* (L.) Wight & Arn.

**Nomenclature:**

_Eragrostis tenella* (L.) P.Beauv. ex Roem. & Schult.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte

*Eragrostis ciliaris* (L.) R.Br.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083172)

*Eragrostis pilosa* (L.) P.Beauv.

**Distribution:** Cosmopolitan

**Notes:** Life Form: therophyte

*Eragrostis tremula* Hochst. ex Steud.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 111 (FR)
**Eragrostis turgida** (Schumach.) De Wild.

- **Distribution:** Paleotropical
- **Notes:** Life Form: therophyte; Voucher: Zwarg 28 (FR)

**Euclasta condylotricha** (Steud.) Stapf

- **Distribution:** Pantropical
- **Notes:** Life Form: therophyte

**Hackelochloa granularis** (L.) Kuntze

- **Distribution:** Pantropical
- **Notes:** Life Form: therophyte; Voucher: Zwarg 33 (FR)

**Heteropogon contortus** (L.) P.Beauv. ex Roem. & Schult.

- **Distribution:** Pantropical
- **Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma (APPG-70065)

**Hyparrhenia cyanescens** (Stapf) Stapf

- **Distribution:** Guineo-Congolian
- **Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 202 (OUA-13565)

**Hyparrhenia diplandra** (Hack.) Stapf

- **Distribution:** Pluriregional African
- **Notes:** Life Form: hemicryptophyte

**Hyparrhenia glabriuscula** (Hochst. ex A.Rich.) Andersson ex Stapf

- **Distribution:** Sudano-Zambesian
- **Notes:** Life Form: hemicryptophyte; Voucher: Schumann (FR-0083165)

**Hyparrhenia involucrata** Stapf

- **Distribution:** Sudanian
- **Notes:** Life Form: therophyte; Voucher: Nacoulma 4547 (OUA-17147)
Hyparrhenia rufa (Nees) Stapf
Distribution: Pantropical
Notes: Life Form: hemicryptophyte; Voucher: Schmidt et al. 6111 (FR-0116607)

Hyparrhenia smithiana (Hook.f.) Stapf
Distribution: Sudanian
Notes: Life Form: hemicryptophyte; Voucher: Nacoulma 186 (OUA-13549)

Hyparrhenia subplumosa Stapf
Distribution: Sudano-Zambesian
Notes: Life Form: hemicryptophyte; Voucher: Nacoulma 4532 (OUA-17112)

Hyperthelia dissoluta (Nees ex Steud.) Clayton
Distribution: Afro-American
Notes: Life Form: hemicryptophyte

Imperata cylindrica (L.) Raeusch.
Distribution: Afro-Malagasy
Notes: Life Form: geophyte

Loudetia flavida (Stapf) C.E.Hubb.
Distribution: Afro-American
Notes: Life Form: therophyte; Voucher: Nacoulma 1 (OUA-13370)

Loudetia simplex (Nees) C.E.Hubb.
Distribution: Sudano-Zambesian
Notes: Life Form: hemicryptophyte; Voucher: Nacoulma 4549 (OUA-17145)

Loudetia togoensis (Pilg.) C.E.Hubb.
Distribution: Sudanian
Notes: Life Form: therophyte; Voucher: Nacoulma 4553 (OUA-17140)
Loudetiopsis kerstingii (Pilg.) Conert

Distribution: Afrotropical

Notes: Life Form: hemicryptophyte; Voucher: Schumann (FR-0083162)

Loxodera ledermannii (Pilg.) Launert

Distribution: Sudanian

Notes: Life Form: therophyte; Voucher: Nacoulma (APPG-70183); New species record for Burkina Faso.

Microchloa indica (L.f.) P.Beauv.

Distribution: Pantropical

Notes: Life Form: therophyte; Voucher: Zwarg 14 (FR)

Monocymbium cerasiiforme (Nees) Stapf

Distribution: Pluriregional African

Notes: Life Form: hemicryptophyte; Voucher: Schumann (FR-0083163)

Oropetium aristatum (Stapf) Pilg.

Distribution: Sudano-Zambesian

Notes: Life Form: hemicryptophyte; Voucher: Schumann (FR-0083161)

Oryza longistaminata A.Chev.& Roehr.

Distribution: Afro-Malagasy

Notes: Life Form: hemicryptophyte; Voucher: Schumann (FR-0083160)

Oxytenanthera abyssinica (A.Rich.) Munro

Distribution: Sudano-Zambesian

Notes: Life Form: phanerophyte

Panicum anabaptistum Steud.

Distribution: Sudanian

Notes: Life Form: hemicryptophyte; Voucher: Schmidt et al. (FR-0007417)
**Panicum fluviicola** Steud.

**Distribution:** Pluriregional African

**Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 216 (OUA-13579)

**Panicum humile** Steud.

**Nomenclature:**

*Panicum* walense Mez

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007407)

**Panicum maximum** Jacq.

**Distribution:** Pantropical

**Notes:** Life Form: hemicryptophyte

**Panicum pansum** Rendle

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Zwarg 25 (FR)

**Panicum phragmitoides** Stapf

**Distribution:** Sudanian

**Notes:** Life Form: hemicryptophyte

**Paspalum scrobiculatum** L.

**Distribution:** Paleotropical

**Notes:** Life Form: hemicryptophyte; Voucher: Katharina Schumann (APPG-3868)

**Pennisetum pedicellatum** Trin.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Zwarg 39 (FR)

**Pennisetum polystachion** (L.) Schult.

**Distribution:** Pantropical
Notes: Life Form: therophyte; Voucher: Zwarg 51 (FR)

**Pennisetum unisetum (Nees) Benth.**

**Nomenclature:**
Beckeropsis uniseta (Nees) K.Schum.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: hemicryptophyte

**Pennisetum violaceum (Lam.) Rich.**

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Nacoulma (APPG-70314)

**Rhytachne triaristata (Steud.) Stapf**

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083156)

**Rottboellia cochinchinensis (Lour.) Clayton**

**Distribution:** Pantropical

**Notes:** Life Form: therophyte

**Sacciolepis africana C.E.Hubb. & Snowden**

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083154)

**Sacciolepis ciliocincta (Pilg.) Stapf**

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte

**Sacciolepis micrococca Mez**

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083153)
**Schizachyrium brevifolium** (Sw.) Buse

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007400)

**Schizachyrium exile** (Hochst.) Pilg.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083150)

**Schizachyrium nodulosum** (Hack.) Stapf

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte

**Schizachyrium platyphyllum** (Franch.) Stapf

**Distribution:** Sudanian

**Notes:** Life Form: therophyte

**Schizachyrium ruderale** Clayton

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083149)

**Schizachyrium rupestre** (K.Schum.) Stapf

**Distribution:** Sudanian

**Notes:** Life Form: hemicryptophyte; Voucher: Schmidt et al. (FR-0007480)

**Schizachyrium sanguineum** (Retz.) Alston

**Distribution:** Pantropical

**Notes:** Life Form: hemicryptophyte

**Schizachyrium urceolatum** (Hack.) Stapf

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083148)
**Schoenefeldia gracilis Kunth**

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte; Voucher: Zwarg 112 (FR)

**Setaria barbata** (Lam.) Kunth

*Distribution:* Pantropical

*Notes:* Life Form: therophyte; Voucher: Katharina Schumann (APPG-4475)

**Setaria pumila** (Poir.) Roem. & Schult.

*Distribution:* Afrotropical

*Notes:* Life Form: therophyte; Voucher: Zizka (APPG-3882)

**Setaria sphacelata** (Schumach.) Stapf & C.E.Hubb. ex Moss

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: therophyte

**Sorghastrum bipennatum** (Hack.) Pilg.

*Distribution:* Paleotropical

*Notes:* Life Form: therophyte; Voucher: Küppers 463 (FR-0015883)

**Sporobolus festivus** Hochst. ex A.Rich.

*Distribution:* Pluriregional African

*Notes:* Life Form: hemicryptophyte; Voucher: Zwarg 36 (FR)

**Sporobolus pyramidalis** P.Beauv.

*Distribution:* Afro-American

*Notes:* Life Form: hemicryptophyte

**Theleptogon elegans** Roth

*Distribution:* Sudano-Zambesian

*Notes:* Life Form: therophyte; Voucher: Schmidt et al. (FR-0007637)
Trachypogon spicatus (L.f.) Kuntze

Distribution: Paleotropical
Notes: Life Form: therophyte

Tripogon minimus (A.Rich.) Hochst. ex Steud.

Distribution: Pluriregional African
Notes: Life Form: hemicryptophyte; Voucher: Schumann (FR-0083142)

Urelytrum muricatum C.E.Hubb.

Distribution: Sudanian
Notes: Life Form: hemicryptophyte

Urochloa jubata (Fig. & De Not.) Sosef

Nomenclature:
Brachiaria jubata (Fig. & De Not.) Stapf
Distribution: Afrotropical
Notes: Life Form: hemicryptophyte

Family Polygalaceae

Polygala arenaria Willd.

Distribution: Pluriregional African
Notes: Life Form: therophyte; Voucher: Zwarg 9 (FR)

Polygala multiflora Poir.

Distribution: Sudanian
Notes: Life Form: therophyte; Voucher: Nacoulma 87 (OUA-13451)

Securidaca longipedunculata Fresen.

Distribution: Afrotropical
Notes: Life Form: phanerophyte; Voucher: Zwarg 124 (FR)
Family Polygonaceae

**Persicaria decipiens** (R.Br.) K.L.Wilson

- **Distribution:** Paleotropical
- **Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083139)

**Persicaria senegalensis** (Meisn.) Soják

- **Nomenclature:**
  - *Polygonum senegalense* Meisn.
- **Distribution:** Pluriregional African
- **Notes:** Life Form: chamaephyte; Voucher: Nacoulma 4560 (OUA-17153)

Family Pontederiaceae

**Eichhornia natans** (P.Beauv.) Solms

- **Distribution:** Afro-American
- **Notes:** Life Form: therophyte; Voucher: Nacoulma 4498 (OUA-17068)

**Heteranthera callifolia** Rchb. ex Kunth

- **Distribution:** Afro-American
- **Notes:** Life Form: therophyte; Voucher: Nacoulma 4591 (OUA-17185)

**Monochoria brevipetiolata** Verdc.

- **Distribution:** Sudano-Zambesian
- **Notes:** Life Form: hemicryptophyte; Voucher: Nacoulma 4508 (OUA-17093)

Family Portulacaceae

**Portulaca foliosa** Ker Gawl.

- **Distribution:** Pantropical
- **Notes:** Life Form: therophyte; Voucher: Zwarg 117 (FR)
Portulaca quadrifida L.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007669)

Family Primulaceae

Anagallis pumila Sw.

**Distribution:** Paleotropical

**Notes:** Life Form: therophyte; Voucher: Schmidt et al. (FR-0007697)

Family Pteridaceae

Ceratopteris cornuta (P. Beauv.) Lepr.

**Nomenclature:**

*Ceratopteris* thalictroides (L.) Brongn.

**Distribution:** Afrotropical

**Notes:** Life Form: hydrophyte

Family Rhamnaceae

Ziziphus abyssinica Hochst. ex A.Rich.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 82 (FR)

Ziziphus mauritiana Lam.

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte

Ziziphus mucronata Willd.

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70453)
Ziziphus spina-christi (L.) Desf.

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 121 (OUA-13485)

Family Rubiaceae

Cremaspora triflora (Thonn.) K.Schum.

**Distribution:** Afro-Malagasy

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (OUA-17130)

Crossopteryx febrifuga (Afzel. ex G.Don) Benth.

**Distribution:** Afrotropical

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 88 (FR)

Fadogia agrestis Schweinf. ex Hiern

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 160 (OUA-13524)

Feretia apodanthera Delile

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Zwarg 98 (FR)

Gardenia aqualla Stapf & Hutch.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 4519 (OUA-17082)

Gardenia erubescens Stapf & Hutch.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70012)

Gardenia sokotensis Hutch.

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma (APPG-70020)
**Gardenia ternifolia** Schumach. & Thonn.

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 199 (OUA-13562)

**Keetia cornelia** (Cham. & Schltdl.) Bridson

**Nomenclature:**
*Canthium cornelia* Cham. & Schltdl.

**Distribution:** Guineo-Congolian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 131 (OUA-13495)

**Keetia venosa** (Oliv.) Bridson

**Distribution:** Pluriregional African

**Notes:** Life Form: phanerophyte; Voucher: Janßen (APPG-5627)

**Kohautia confusa** (Hutch. & Dalziel) Bremek.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte

**Kohautia grandiflora** DC.

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083134)

**Kohautia tenuis** (Bowdich) Mabb.

**Nomenclature:**
*Kohautia senegalensis* Cham. & Schltdl.

**Distribution:** Pluriregional African

**Notes:** Life Form: therophyte; Voucher: Zwarg 34 (FR)

**Macrosphyra longistyla** (DC.) Hiern

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: phanerophyte; Voucher: Nacoulma 172 (OUA-13536)
**Mitracarpus hirtus** (L.) DC.

Distribution: Pantropical

Notes: Life Form: therophyte; Voucher: Zwarg 42 (FR)

**Mitragyna inermis** (Willd.) Kuntze

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007387)

**Morelia senegalensis** A.Rich. ex DC.

Distribution: Guineo-Congolian-Sudano-Zambesian

Notes: Life Form: phanerophyte; Voucher: Nacoulma 134 (OUA-13498)

**Oldenlandia capensis** L.f.

Distribution: Cosmopolitan

Notes: Life Form: therophyte

**Pavetta crassipes** K.Schum.

Distribution: Afrotropical

Notes: Life Form: phanerophyte; Voucher: Nacoulma 93 (OUA-13457)

**Pouchetia africana** A.Rich. ex DC.

Distribution: Afrotropical

Notes: Life Form: phanerophyte; Voucher: Nacoulma 120 (OUA-13484)

**Rytigynia senegalensis** Blume

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007390)

**Sabicea venosa** Benth.

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007422)
Sarcocephalus latifolius (Sm.) E.A.Bruce

Distribution: Sudano-Zambesian

Notes: Life Form: phanerophyte; Voucher: Zizka (APPG-3871)

Spermacoce chaetocephala DC.

Distribution: Pluriregional African

Notes: Life Form: therophyte; Voucher: Nacoulma (APPG-70369)

Spermacoce filifolia (Schumach. & Thonn.) J.-P.Lebrun & Stork

Distribution: Pluriregional African

Notes: Life Form: therophyte; Voucher: Zwarg 8 (FR)

Spermacoce hepperana Verdc.

Distribution: Sudano-Zambesian

Notes: Life Form: therophyte; Voucher: Nacoulma 4493 (OUA-17073)

Spermacoce radiata (DC.) Hiern

Distribution: Sudano-Zambesian

Notes: Life Form: therophyte; Voucher: Nacoulma (APPG-70372)

Spermacoce stachydea DC.

Distribution: Pantropical

Notes: Life Form: therophyte; Voucher: Zwarg 69 (FR)

Spermacoce verticillata L.

Distribution: Afrotropical (introduced)

Notes: Life Form: chamaephyte; Voucher: Nacoulma 253 (OUA-17219)

Family Rutaceae

Zanthoxylum zanthoxyloides (Lam.) Zepern. & Timler

Distribution: Sudanian

Notes: Life Form: phanerophyte
Family Salicaceae

*Flacourtia indica* (Burm.f.) Merr.

Nomenclature:
*Flacourtia flavescens* Willd.

Distribution: Pantropical

Notes: Life Form: phanerophyte; Voucher: Nacoulma 4538 (OUA-17107)

*Oncoba spinosa* Forssk.

Distribution: Paleotropical

Notes: Life Form: phanerophyte

*Salix chevalieri* Seemen

Distribution: Afrotropical

Notes: Life Form: phanerophyte; Voucher: Schumann (FR-0083133); New species record for Burkina Faso.

Family Sapindaceae

*Allophylus africanus* P.Beauv.

Distribution: Afrotropical

Notes: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007404)

*Allophylus spicatus* (Poir.) Radlk.

Distribution: Guineo-Congolian

Notes: Life Form: phanerophyte; Voucher: Nacoulma (OUA-17074)

*Cardiospermum halicacabum* L.

Distribution: Pantropical

Notes: Life Form: phanerophyte; Voucher: Nacoulma 39 (OUA-13404)

*Paullinia pinnata* L.

Distribution: Afro-American
Notes: Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007393)

Zanha golungensis Hiern

Distribution: Afrotropical

Notes: Life Form: phanerophyte; Voucher: Nacoulma 4566 (OUA-17129)

Family Sapotaceae

Manilkara multinervis (Baker) Dubard

Distribution: Pluriregional African

Notes: Life Form: phanerophyte; Voucher: Nacoulma 109 (OUA-13473)

Mimusops kummel Bruce ex A.DC.

Distribution: Sudanian

Notes: Life Form: phanerophyte

Vitellaria paradoxa C.F.Gaertn.

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Georg Zizka (APPG-3906)

Family Selaginellaceae

Selaginella buchholzii Hieron.

Distribution: Guineo-Congolian

Notes: Life Form: therophyte; Voucher: Nacoulma 5289 (OUA-17775); New species record for Burkina Faso.

Family Simaroubaceae

Quassia undulata (Guill. & Perr.) D.Dietr.

Nomenclature:

Hannoa undulata (Guill. & Perr.) Planch.

Distribution: Sudanian

Notes: Life Form: phanerophyte; Voucher: Nacoulma 100 (OUA-13464)
Family Solanaceae

*Physalis lagascae* Roem. & Schult.

**Distribution:** Sudanian

**Notes:** Life Form: therophyte; Voucher: Schumann (FR-0083123)

*Solanum incanum* L.

**Distribution:** Paleotropical

**Notes:** Life Form: phanerophyte; Voucher: Schumann (FR-0083122)

Family Sphenocleaceae

*Sphenoclea zeylanica* Gaertn.

**Distribution:** Pantropical

**Notes:** Life Form: therophyte; Voucher: Nacoulma 210 (OUA-13573)

Family Thymelaeaceae

*Gnidia kraussiana* Meisn.

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma 4490 (OUA-17076)

*Synaptolepis retusa* H.Pearson

**Distribution:** Sudanian

**Notes:** Life Form: chamaephyte; Voucher: Nacoulma (OUA-17124); New species record for Burkina Faso.

Family Urticaceae

*Pouzolzia guineensis* Benth.

**Distribution:** Pantropical

**Notes:** Life Form: phanerophyte; Voucher: Schmidt et al. (FR-0007631)
Family Violaceae

*Hybanthus enneaspermus* (L.) F.Muell.

- **Distribution:** Paleotropical
- **Notes:** Life Form: therophyte

Family Vitaceae

*Ampelocissus bombycina* (Baker) Planch.

- **Distribution:** Sudanian
- **Notes:** Life Form: phanerophyte; Voucher: Nacoulma 4567 (OUA-17128); New species record for Burkina Faso.

*Ampelocissus leonensis* (Hook.f.) Planch.

- **Distribution:** Sudanian
- **Notes:** Life Form: phanerophyte

*Ampelocissus multistriata* (Baker) Planch.

- **Nomenclature:**
  *Ampelocissus* pentaphylla Gilg & M.Brandt
- **Distribution:** Sudano-Zambesian
- **Notes:** Life Form: phanerophyte; Voucher: Nacoulma 4617 (OUA-17208)

*Cayratia gracilis* (Guill. & Perr.) Suess.

- **Distribution:** Afro-American
- **Notes:** Life Form: phanerophyte

*Cissus aralioides* (Welw. ex Baker) Planch.

- **Distribution:** Afrotropical
- **Notes:** Life Form: phanerophyte; Voucher: Nacoulma 51 (OUA-13416)

*Cissus cornifolia* (Baker) Planch.

- **Distribution:** Sudanian
**Notes**: Life Form: chamaephyte

*Cissus diffusiflora* (Baker) Planch.

**Distribution**: Guineo-Congolian

**Notes**: Life Form: hemicryptophyte

*Cissus palmatifida* (Baker) Planch.

**Distribution**: Pluriregional African

**Notes**: Life Form: phanerophyte; Voucher: Nacoulma (APPG-69807)

*Cissus populnea* Guill. & Perr.

**Distribution**: Sudanian

**Notes**: Life Form: phanerophyte; Voucher: Nacoulma (APPG-69810)

*Cissus quadrangularis* L.

**Distribution**: Paleotropical

**Notes**: Life Form: phanerophyte; Voucher: Nacoulma (APPG-69812)

*Cissus rufescens* Guill. & Perr.

**Distribution**: Sudanian

**Notes**: Life Form: geophyte

*Cyphostemma adenocaule* (Steed. ex A.Rich.) Desc. ex Wild & R.B.Drumm.

**Distribution**: Sudanian

**Notes**: Life Form: chamaephyte; Voucher: Nacoulma (APPG-69920)

*Cyphostemma flavicans* (Baker) Desc.

**Distribution**: Sudanian

**Notes**: Life Form: geophyte; Voucher: Nacoulma (APPG-69805)
Family Xanthorrhoeaceae

*Aloe buettneri* A.Berger

**Distribution:** Sudanian

**Notes:** Life Form: geophyte

Family Ximeniaceae

*Ximenia americana* L.

**Distribution:** Pantropical

**Notes:** Life Form: phanerophyte; Voucher: Hahn (APPG-2867)

Family Zingiberaceae

*Siphonochilus aethiopicus* (Schweinf.) B.L.Burtt

**Distribution:** Sudano-Zambesian

**Notes:** Life Form: geophyte; Voucher: Nacoulma (APPG-70133)

Family Zygophyllaceae

*Balanites aegyptiaca* (L.) Delile

**Distribution:** Sudanian

**Notes:** Life Form: phanerophyte

**Analysis**

**Composition of the local flora**

The 721 species found in the study area belong to 385 genera and 102 plant families, the families with most species being Fabaceae (126 spp.), Poaceae (102 spp.) and Cyperaceae (44 spp.) (Fig. 3). The genera with most species in the study area are *Indigofera* (20 spp.), *Crotalaria* (17 spp.) and *Acacia* (13 spp.), all belonging to Fabaceae.

Therophytes and phanerophytes are the most prominent life forms, followed by hemicryptophytes, geophytes and chamaephytes (Fig. 4). Only very few hydrophytes and epiphytes are present.
The best represented distribution types in the flora are specific to the vegetation zone, either Sudanian or Sudano-Zambesian (Fig. 5). Species with wider distributions in the tropics (pantropical, paleotropical) or within continental Africa (afrotropical, pluriregional African) follow. The remaining distribution types have smaller shares and comprise either distributions extending to other continents or Madagascar or belong to the neighbouring zones under higher rainfall regimes, typically extending into the Sudan along gallery forests of the larger watercourses.

Figure 3. doi
Family spectrum of the flora of the W National Park with number of species for the 10 largest plant families in the study area and all remaining families.

Figure 4. doi
Life form spectrum of the flora of the W National Park.
New species records for Burkina Faso

A number of species have been found in the study area that have not been documented in the vascular plant catalogue of Burkina Faso (Thiombiano et al. 2012), nor in the supplement by Schmidt (2018); some of these are shown in Fig. 2. These 19 species are Aponogeton vallisnerioides (Aponogetonaceae), Drimiopsis barteri (Asparagaceae), Eleocharis naumanniana (Cyperaceae), Jatropha atacorensis, Tragia laminularis (Euphorbiaceae), Aeschynomene americana, Alysicarpus vaginalis, Crotalaria lachnophora, Desmodium ramosissimum, Indigofera garckeana, Vigna nigritia (Fabaceae), Gladiolus unguiculatus (Iridaceae), Ophioglossum thomasii (Ophioglossaceae), Chloris gayana, Loxodera ledermannii (Poaceae), Salix chevalieri (Salicaceae), Selaginella buchholzii (Selaginellaceae), Synaptolepis retusa (Thymelaeaceae) and Ampelocissus bombycina (Vitaceae). The number of vascular plants known for Burkina Faso therefore increases to 2099 species.

Red Lists

Unlike for neighbouring Benin (Neuenschwander et al. 2011), there is no country-specific Red List for Burkina Faso yet. Amongst the 14 species listed for Burkina Faso on the global IUCN Red List (IUCN 2020) in the categories endangered (EN), near threatened (NT) or
vulnerable (VU), the following occur in our study area: *Pterocarpus erinaceus* (EN), *Afzelia africana* (VU) and *Khaya senegalensis* (VU).

**Introduced species**

Amongst the species occurring in the study area, 17 species have been identified as being introduced: *Acanthospermum hispidum*, *Ageratum conyzoides*, *Azadirachta indica*, *Bidens pilosa*, *Cassia obtusifolia*, *Chrysanthellum indicum*, *Desmodium adscendens*, *Hyptis spicigera*, *H. suaveolens*, *Indigofera microcarpa*, *Ludwigia erecta*, *Martynia annua*, *Passiflora foetida*, *Plumbago zeylanica*, *Scoparia dulcis*, *Spermacoce verticillata* and *Tridax procumbens*. The families best represented in this group are Asteraceae (5 spp.) and Fabaceae (3 spp.).

**Discussion**

With 721 documented species, the Burkina Faso part of the W National Park is, so far, the most species-rich nature reserve in Burkina Faso. Neither the protected areas of the same Sudano-sahelian climatic zone nor those in the Sudanian climatic zone have an equally-high diversity. In the Sudano-sahelian zone, the reserve of Pama and Arly National Park sustain 450 and 490 species, respectively (Mbayngone et al. 2008, Ouédraogo et al. 2011), whereas the classified forests of Kou and Niangoloko, as well as the classified forest and partial faunal reserve of Comoé-Léraba in the Sudanian zone, have 353, 275 and 521 species, respectively (Guinko and Thiombiano 2005, Ouôba 2006, Gnounou et al. 2015).

Several factors might explain this: to a large extent, the high plant diversity can be assigned to habitat diversity and a moderate degree of disturbance, but also to a relatively large area within an even larger complex of neighbouring protected areas. In Burkina Faso, the study sites are known for the diversity of their natural habitats, i.e. the Gobnangou and Atakora mountains, wetlands and gallery forests, termite mounds as well as anthropogenic relics of the past. Anthropogenic relics are still visible with metallurgical sites and baobab vegetation types, being closely linked to human settlements as shown by Duvall (2007).

Thorough spatial, ecological and seasonal sampling have certainly contributed to a good documentation of the area, building on experiences from similar studies in protected areas and focussed collection activities for the documentation of the flora of Burkina Faso (van der Burgt et al. 2010).

Finally, based on different scenarios, recent investigations (Schmidt et al. 2017) identified the southeast of Burkina Faso, around the W National Park, as one of the two hotspots of plant diversity of the country. Our present results confirm and strengthen these scenarios. There are no species endemic to W National Park and *Isoetes jaegeri*, the only plant still recognised as endemic to Burkina Faso does not occur here, being known exclusively from the sandstone massif in the southwest of the country. Including the 19 newly-documented species, the W National Park harbours more than one third of the plant diversity known for
Burkina Faso, making it an important area for plant conservation in a landscape setting where biodiversity outside of protected areas is increasingly threatened by intensified agriculture (Zoungrana et al. 2018). At the country level, Da et al. (2018) evaluated the percentage of modelled plant species distributions covered by protected areas and came up with a figure of 77% for Burkina Faso. Our results confirm the importance of these reserves for plant conservation with primary biodiversity data.

The composition of the flora by families, life forms and distribution types follows the same patterns as in other protected areas of the WAP complex (Assédé et al. 2012, Mbayngone et al. 2008, Ouédraogo et al. 2011). The dominance of Fabaceae and Poaceae may be explained by their respective innovations in N-fixation and C₄-photosynthesis, making them well-adapted to savanna environments. Therophytes and phanerophytes are the dominant life forms here and in the wider area of the West African savanna belt, with therophytes being more important in the drier north and phanerophytes in the wetter south (Schmidt et al. 2005). The large proportion of widespread species in West African savanna areas like the W National Park may be explained by the dominance of the savanna vegetation in a vast continuous band throughout West Africa in combination with the lack of effective barriers, such as higher mountains which separate savanna areas in other parts of Africa (White 1983).

Only few species from Burkina Faso have been Red-listed by IUCN, the three species in the W National Park all being sought-after timber species. The IUCN Red List is a good instrument to target species for conservation measures. However, only few species of the West African Flora have been evaluated, for Burkina Faso less than 20% (400 out of 2099 spp., IUCN 2020). Continued efforts will be necessary to get a better idea on threats and necessary conservation measures and a prerequisite are scientifically reliable assessments, accessible to the community and representing important parts of the region.

The number of 17 introduced plant species (2.3%) is rather low when compared to the 116 introduced species (5.5%) on the country scale (Zizka et al. 2015). It shows the success of these neophytes in protected areas under limited anthropogenic influence and may stimulate research on introduction routes and more in-depth studies on neobiota in Burkina Faso in general.

Acknowledgements

Fieldwork for this study was funded by the SUN-project (FP7 INCO-dev 031685). We are grateful to all foresters and guides of the Provincial and Departmental Forestry Office in Diapaga and especially to Commanders Célestin P. Zida and Zacharia Traoré, our „W park fathers“ for all their assistance during the fieldwork. A special thank you to Dr Dimobé Kangbeni for editing the map of the study area. A grant by the „Ministère des Enseignements Supérieurs et de la Recherche Scientifique (MESRSI)“ of Burkina Faso provided funds to stay at Palmengarten/Frankfurt for processing the data and drafting the manuscript. Finally, we thank Dr. Clemens Bayer, Deputy Director of Palmengarten for the
invitation and Dr. Stefan Dressler of Senckenberg Natural History Museum Frankfurt for identification of herbarium samples.

References

- Thiombiano A, Kampmann D (2010) Fauna. In: Adouabou B, Belemsobgo U, Nana S, Kafando P Biodiversity Atlas of West Africa - Burkina Faso. BIOTA, Frankfurt & Ouagadougou, 592 pp. URL: https://www.uni-frankfurt.de/47671336/BF_Atlas_complete.pdf
- Akoegninou A, van der Burg WJ, van der Maesen LJ (2006) Flore analytique du Bénin. Backhuys Publishers, Cotonou & Wageningen, 1034 pp.
- Arbonnier M (2000) Arbres, arbustes et lianes des zones sèches d’Afrique de l’Ouest. CIRAD/MNHN, Montpellier & Paris, 573 pp.
- Assédé ES, Adomou A, Sinsin B (2012) Magnoliophyta, Biosphere Reserve of Pendjari, Atacora Province, Benin. Check List 8 (4): 642-661. https://doi.org/10.15560/8.4.642
- Balança G, Cornélis D, Wilson R (2007) Les oiseaux du Complexe WAP. ECOPAS, Imp., Louisjean, 199 pp.
- Clerici N, Bodini A, Eva H, Grégoire J, Dulieu D, Paolini C (2007) Increased isolation of two biosphere reserves and surrounding protected areas (WAP ecological complex, West Africa). Journal for Nature Conservation 15 (1): 26-40. https://doi.org/10.1016/j.jnc.2006.08.003
- Conseil Scientifique pour l’Afrique au Sud du Sahara (1956) Specialist Meeting on Phytogeography, Yangambi, 28th July-8th August, 1956. CCTA, London, 33 pp.
- Da SS, García Márquez JR, Sommer JH, Thiombiano A, Zizka G, Dressler S, Schmidt M, Chatelain C, Barthlott W (2018) Plant biodiversity patterns along a climatic gradient and across protected areas in West Africa. African Journal of Ecology 56 (3): 641-652. https://doi.org/10.1111/aje.12517
- Dressler S, Schmidt M, Zizka G (2014) Introducing African plants — A photo guide — An interactive photo data-base and rapid identification tool for Continental Africa. Taxon 63 (5): 1159-1161. https://doi.org/10.12705/635.26
- Duvall C (2007) Human settlement and baobab distribution in south-western Mali. Journal of Biogeography 34 (11): 1947-1961. https://doi.org/10.1111/j.1365-2699.2007.01751.x
- Erpenbach A, Bernhardt-Römermann M, Wittig R, Thiombiano A, Hahn K (2012) The influence of termite-induced heterogeneity on savanna vegetation along a climatic gradient in West Africa. Journal of Tropical Ecology 29 (1): 11-23. https://doi.org/10.1017/s0266467412000703
- Fontès J, Guinko S (1995) Carte de la végétation et de l’occupation du sol au Burkina Faso. Notice explicative. Ministère de la coopération Française, Toulouse, 67 pp.
- Gnounou A, Ouedraogo O, Schmidt M, Thiombiano A (2015) Floristic diversity of classified forest and partial faunal reserve of Comoé-Léraba, southwest Burkina Faso. Check List 11 (1): 1-17. https://doi.org/10.15560/11.1.1557
- Guinko S, Thiombiano A (2005) Florule de la Forêt Classée du Kou (Burkina Faso). Université de Ouagadougou, 145 pp.
A checklist of vascular plants of the W National Park in Burkina Faso, ...

- Hahn-Hadjali K (1998) Pflanzensoziologische Studien der sudanesischen Savannen im Südosten Burkina Fasos (Westafrika). Etudes sur la flore et la végétation du Burkina Faso et des pays voisins: 3: 3-79.
- Hutchinson J, Dalziel JM (1972) Flora of West Tropical Africa. 2nd ed. revised by Keay RWJ and Hepper FN, I-III. Crown Agents for Oversea Governments and Administrations, London, 828, 544, 574 pp.
- IUCN (2020) The IUCN Red List of Threatened Species. Version 2020-1. www.iucnredlist.org. Accessed on: 2020-4-22.
- Konrad T (2015) Governance of protected areas in West Africa. The case of the W-Arly-Pendjari (WAP) complex in Benin and Burkina Faso. Universität Würzburg, 274 pp.
- Lamarque F (2004) Les grands mammifères du complexe WAP. CIRAD, Montpellier, 250 pp.
- Mahamane A (2005) Etudes floristique, phytosociologique et phytogéographique de la végétation du Parc Régional du W du Niger. Université Libre de Bruxelles, 497 pp.
- Mbayngone E, Schmidt M, Hahn-Hadjali K, Thiombiano A, Guinko S (2008) Magnoliophyta of the partial faunal reserve of Pama, Burkina Faso. Check List 4 (3): 251-266. https://doi.org/10.15560/4.3.251
- Miller DC, Minn M, Sinsin B (2015) The importance of national political context to the impacts of international conservation aid: evidence from the W National Parks of Benin and Niger. Environmental Research Letters 10 (11): 115001. https://doi.org/10.1088/1748-9326/10/11/115001
- Thiombiano A, Kampmann D (2010) W National Park of Burkina Faso: a park with enormous potential. In: Nacoulma BMI, Ouédraogo O Biodiversity Atlas of West Africa - Burkina Faso. BIOTA, Frankfurt & Ouagadougou, 592 pp. URL: https://www.uni-frankfurt.de/47671336/BF_Atlas_complete.pdf
- Nacoulma BMI, Schumann K, Traoré S, Bernhardt-Römermann M, Hahn K, Wittig R, Thiombiano A (2011) Impacts of land-use on West African savanna vegetation: a comparison between protected and communal area in Burkina Faso. Biodiversity and Conservation 20 (14): 3341-3362. https://doi.org/10.1007/s10531-011-0114-0
- Nacoulma BMI (2012) Dynamique et stratégies de conservation de la végétation et de la phytodiversité du complexe écologique du Parc National du W du Burkina Faso. Université de Ouagadougou, 151 + 37 pp.
- Neuenschwander P, Sinsin B, Goergen G (2011) Protection de la Nature en Afrique de l’Ouest: Une Liste Rouge pour le Bénin. IITA
- Ouédraogo A (2006) Diversité et dynamique de la végétation ligneuse de la partie orientale du Burkina Faso. Université de Ouagadougou
- Ouédraogo O, Schmidt M, Thiombiano A, Hahn K, Guinko S, Zizka G (2011) Magnoliophyta, Arly National Park, Tapoa, Burkina Faso. Check List 7 (1): 85-100. https://doi.org/10.15560/7.1.85
- Ouôba P (2006) Flore et végétation de la forêt classée de Niangoloko, Sud-ouest du Burkina Faso. Université de Ouagadougou, 140 pp.
- Perez-Vera F (2003) Les orchidées de Côte d’Ivoire. Editions Biotope, Mèze, 576 pp.
- PNUD (2004) Renforcer l’efficacité et catalyser la durabilité du système des aires protégées du W-Arly-Pendjari (WAP). PNUD, 190 pp.
- Pollecot P (1995) Les Poaceae de Côte d’Ivoire. Boissiera, 50. Conservatoire et Jardin Botanique, Génève, 734 pp.
• Poilecot P (1999) Les Poaceae du Niger. Boissiera, 56. Conservatoire et Jardin Botanique, Génève, 766 pp.
• Schmidt M, Kreft H, Thiombiano A, Zizka G (2005) Herbarium collections and field data-based plant diversity maps for Burkina Faso. Diversity & Distributions 11 (6): 509-516. https://doi.org/10.1111/j.1366-9516.2005.00185.x
• van der Burgt X, van der Maesen J, Onana JM (2010) Assessment of the flora of Burkina Faso. In: Schmidt M, Thiombiano A, Ouédraogo A, Dressler S, Hahn-Hadjali K, Zizka G Systematics and conservation of African plants. Royal Botanic Gardens Kew, London, 571-576 pp.
• Schmidt M, Assédé E, Oebel H, Fahr J, Sinsin B (2016) Biota of the WAP complex – starting a citizen science project for West Africa’s largest complex of protected areas. Flora et Vegetatio Sudano-Sambesica 19: 3-6. https://doi.org/10.21248/fvss.19.31
• Schmidt M, Zizka A, Traoré S, Ataholo M, Chatelain C, Daget P, Dressler S, Hahn K, Kirchmair I, Krophmer J, Mbayngone E, Müller J, Nacoulma B, Ouédraogo A, Ouédraogo O, Sambaré O, Schumann K, Wieringa J, Zizka G, Thiombiano A (2017) Diversity, distribution and preliminary conservation status of the flora of Burkina Faso. Phytotaxa 304 (1): 1-215. https://doi.org/10.11646/phytotaxa.304.1.1
• Schmidt M (2018) New species records for the flora of Burkina Faso. Flora et Vegetatio Sudano-Sambesica 21: 3-6. https://doi.org/10.21248/fvss.21.55
• Schmidt M, Ouédraogo A, Thiombiano A, Wong LJ, Pagad S (2020) Global Register of Introduced and Invasive Species - Burkina Faso. Version 1.2. GBIF. URL: https://doi.org/10.15468/t8i4ao
• Schulte to Bühne H, Wegmann M, Durant S, Ransom C, de Ornellas P, Grange S, Beatty H, Pettorelli N (2017) Protection status and national socio-economic context shape land conversion in and around a key transboundary protected area complex in West Africa. Remote Sensing in Ecology and Conservation 3 (4): 190-201. https://doi.org/10.1002/rse2.47
• Schumann K, Nacoulma BI, Hahn K, Traoré S, Thiombiano A, Bachmann Y (2016) Modeling the distributions of useful woody species in eastern Burkina Faso. Journal of Arid Environments 135: 104-114. https://doi.org/10.1016/j.jaridenv.2016.08.017
• Thiombiano A, Schmidt M, Dressler S, Ouédraogo A, Hahn K, Zizka G (2012) Catalogue des plantes vasculaires du Burkina Faso. Boissiera, 65. Conservatoire et Jardin Botanique, Génève, 391 pp. https://doi.org/10.13140/RG.2.1.4734.1521
• UNESCO World Heritage Committee (2017) Decision : 41 COM 8B.3 W-Arly-Pendjari Complex (Benin, Burkina Faso, Niger). http://whc.unesco.org/en/decisions/6867. Accessed on: 2020-5-07.
• White F (1983) The Vegetation of Africa, a descriptive memoir to accompany the UNESCO/AETFAT/UNSO vegetation map of Africa. UNESCO, Paris, 356 pp. URL: https://unesdoc.unesco.org/ark:/48223/pf0000058054
• Zizka A, Thiombiano A, Dressler S, Nacoulma BI, Ouédraogo A, Ouédraogo I, Ouédraogo O, Zizka G, Hahn K, Schmidt M (2015) The vascular plant diversity of Burkina Faso (West Africa) — A quantitative analysis and implications for conservation. Candollea 70 (1): 9-20. https://doi.org/10.15553/c2015v701a2
• Zoungrana B, Conrad C, Thiel M, Amekudzi L, Da ED (2018) MODIS NDVI trends and fractional land cover change for improved assessments of vegetation degradation in Burkina Faso, West Africa. Journal of Arid Environments 153: 66-75. https://doi.org/10.1016/j.jaridenv.2018.01.005
• Zwarg A, Schmidt M, Janßen T, Hahn K, Zizka G (2012) Plant diversity, functional traits and soil conditions of grass savannas on lateritic crusts (bowé) in south eastern Burkina Faso. Flora et Vegetatio Sudano-Sambesica 15: 15-24, https://doi.org/10.21248/fvss.15.18