

# TIPAs Guinea Darwin Project report

Field expedition to Fouta Djallon 14-27 October 2016

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## Introduction

A two week expedition to the Fouta Djallon was undertaken to look at the bowal areas and vestiges of forest in the areas around Dalaba, Pita and Labe. The aim was to look for species of conservation concern (CPS) for the Darwin TIPAs programme and gather data on these species for the Red Data List for Guinea, and to gather data for characterisation of the habitats and assessment for TIPA status. Some of these species had not been seen for 50+ years in this area and it was therefore unknown if they continued to survive here. This data will affect how those species are assessed for IUCN. This particular time was chosen as this is when many of the CPS and the bowal grasses are in flower, making it easier to identify them.

## Methodology

The patrol method of collection was used as well as a quick survey for ground truthing and gathering species frequency data and threats present. Some small plots (2x2m) were made to compare grassland species in different areas. Silica samples of a number of specimens were made to allow molecular study, and some seeds were collected for banking.

## Results

A total of 302 specimens were collected from 44 families were collected.

Collector	No.s
Balde, A.	47-126
Couch, C.	820-911
Fofana, F.	282-330
Larridon, I	10-92

Two important CPS were rediscovered in the area around Dalaba on the Diaguissa Plateau. These are *Vernonia djalonensis* (EN) and *Kotschyia micrantha* (VU). These species had not been collected since Jacques Felix and Adams collections in 1956. Both of these species are potentially threatened from a new housing development along the road to Boulivel from Dalaba. The largest population of *Vernonia djalonensis* is where the housing plan has been laid out and there is a mobile phone mast. *Kotschyia micrantha* is found in marshy areas and there is a large population on the flatter top part of the plateau. Here there are power lines running across this area, but it looks largely undisturbed.

*Kotschyia micrantha* was also found at sites in the Pita prefecture near Bantignel in smaller numbers.

*Mesanthemum tuberosum* (EN/VU) was also found in the Dalaba area on the Diaguissa plateau and at Koba. It was found at sites near Labe and Pita (Melikança).

A number of other species which have yet to be assessed formally, though are suspected of being threatened were also identified such as *Emilia guineensis*, *Indigofera capitata*, *Utricularia macrocheilos*, *Plectranthus sp. nov.* Gangan, *Aeollanthus paradoxus* and *Djaloniella ypilostyla*.

The Diaguissa plateau and the sandstone areas around Dalaba appear initially to be more diverse in species than those sites at Pita and Labe that were visited. This could be due to different substrates however, it needs further investigation.

65 collections of grasses were made during this expedition revealing 45 different species. Some of these grasses are specific to bowal habitat. More work is needed to see if these species can be used to characterise the bowal in different areas of the Fouta Djallon and if these are associated with different substrates.

The Tinkasso forest at Dalaba was visited, though not thoroughly searched. A potential new species of *Keetia* has been found.

### **Conclusions and Recommendations**

The Diaguissa plateau is the most diverse of the areas visited and is also the one most under threat. We recommend that the Prefecture be consulted about the future protection of the site south of Dalaba on the road to Boulivel in order to prevent its total destruction by the planned housing development. A conservation poster has been created for *Vernonia djalensis* and *Kotschyamichrantha* as well as others, that should be distributed to the Prefecture and Department of Forestry so that they can continue to record where these species are found and provide protection and education to the local population about them.

Further exploration of bowal sites in the Fouta Djallon are required to gather more information on the historical sites of certain species. The area between Ditinn and Timbo is cited on specimens and needs to be explored.

Though the forest at Tinkasso has been severely degraded, it is recommended that these and other similar areas are explored further to determine what is actually there and the quality of the forest. They are the last surviving areas of submontane forest in the region.



*Mesanthemum tuberosum*



*Vernonia djalonensis*





*Kotschy micrantha*

## Species List

### **Acanthaceae**

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Asystasia buettneri  
Brillantaisia lamium  
Hypoestes cancellata  
Lepidagathis collina

### **Amaranthaceae**

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Achyranthes aspera  
Pandiaka heudelotii

### **Anacardiaceae**

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Sorindeia juglandifolia

### **Annonaceae**

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Monanthes sp.  
Uvaria sofa

### **Burmanniaceae**

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Burmannia madagascariensis

### **Burseraceae**

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Santiria trimera

### **Cochlospermaceae**

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Cochlospermum planchonii

### **Combretaceae**

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Combretum molle  
Terminalia glaucescens

### **Commelinaceae**

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Commelina capitata  
Commelina gambiae  
Commelina nigritana  
Cyanotis arachnoidea var. arachnoidea  
Cyanotis lanata  
Cyanotis longifolia

### **Compositae**

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Adelostigma senegalense  
Bidens sp.  
Bidens pilosa  
Compositae  
Emilia guineensis  
Vernonia sp.  
Vernonia djalonensis

### **Connaraceae**

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Rourea minor

### **Cucurbitaceae**

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Momordica foetida

### **Cyperaceae**

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Afrotrilepis pilosa  
Ascolepis sp.  
Ascolepis protea

Bulbostylis coleotricha  
Bulbostylis congolensis  
Carex neochevalieri  
Cyperus difformis  
Cyperus flavescens subsp. flavescens  
Cyperus mapanioides  
Cyperus pustulatus  
Cyperus tenuiculmis var. guineensis  
Diplacrum africanum  
Fimbristylis sp.  
Fimbristylis alboviridis  
Fimbristylis dichotoma var. dichotoma  
Hypolytrum senegalense  
Lipocarpha sp.  
Lipocarpha albiceps  
Lipocarpha filiformis  
Lipocarpha nana  
Microdracoides squamosus  
Nemum spadiceum subsp. spadiceum  
Pycnus sp.  
Rhynchospora brevirostris  
Rhynchospora eximia  
Schoenoplectiella senegalensis  
Scleria catophylla  
Scleria naumanniana  
Scleria robinsoniana

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#### **Dioscoreaceae**

Dioscorea togoensis

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#### **Droseraceae**

Drosera indica

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#### **Eriocaulaceae**

Eriocaulon afzelianum  
Eriocaulon deightonii  
Eriocaulon pulchellum  
Eriocaulon remotum  
Eriocaulon sessile  
Mesanthemum sp.  
Mesanthemum prescottianum  
Mesanthemum tuberosum

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#### **Euphorbiaceae**

Antidesma membranaceum  
Margaritaria discoidea  
Uapaca togoensis

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#### **Fern**

Fern sp.

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#### **Flacourtiaceae (Salicaceae)**

Flacourtia vogelii

## Gentianaceae

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Djaloniella ypsilostyla  
Neurotheca loeselioides  
Sebaea luteo-alba

## Gramineae

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Anadelphia  
Anadelphia afzeliana  
Anadelphia leptocoma  
Anadelphia polychaeta  
Andropogon africanus  
Andropogon fastigiatus  
Andropogon perligulatus  
Anthehora ampullacea  
Ctenium newtonii  
Danthoniopsis chevalieri  
Diheteropogon amplexens var. catangensis  
Dilophotriche tristachyoides  
Echinochloa callopus  
Eleusine indica  
Elymandra subulata  
Eragrostis atrovirens  
Eragrostis gangetica  
Eragrostis unioides  
Hyparrhenia cyanescens  
Loudetia coarctata  
Loudetia kagerensis  
Loudetia simplex  
Loudetia togoensis  
Loudetiopsis capillipes  
Oplismenus burmannii  
Oryza brachyantha  
Panicum humile  
Panicum pilgeri  
Panicum sadinii  
Panicum tenellum  
Parahyparrhenia annua  
Paspalum scrobiculatum  
Pennisetum polystachion subsp. atrichum  
Pennisetum violaceum  
Perotis scabra  
Rhytachne gracilis  
Sacciolepis ciliocincta  
Schizachyrium brevifolium  
Schizachyrium gresicola  
Schizachyrium scintillans  
Sporobolus paniculatus  
Sporobolus sanguineus

Urelytrum annuum

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**Hypericaceae**

Psorospermum febrifugum

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**indet.**

Indet.

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**Labiatae**

Aeollanthus paradoxus

Aeollanthus pubescens

Clerodendrum umbellatum

Labiatae

Mesosphaerum suaveolens

Plectranthus monostachyus subsp. lateriticola

Plectranthus sp. nov. Gangan

Vitex doniana

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**Lecythydaceae**

Napoleonaea cf. heudelotii

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**Leguminosae**

Leguminosae sp.

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**Leguminosae-Caesalpinioideae**

Chamaecrista mimosoides

Piliostigma thonningii

Senna obtusifolia

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**Leguminosae-Papilionoideae**

Bryaspis lupulina

Crotalaria hyssopifolia

Crotalaria lathyroides

Cyclocarpa stellaris

Dalbergia adamii

Dalbergia oblongifolia

Dolichos dinklagei

Eriosema glomeratum

Indigofera capitata

Indigofera elliotii

Indigofera megacephala

Indigofera nummulariifolia

Kotschya sp.

Kotschya micrantha

Kotschya ochreatea var. ochreatea

Leguminosae-Papilionoideae

Tephrosia platycarpa

Vigna gracilis

Vigna venulosa

Zornia glochidiata

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**Lentibulariaceae**

Genlisea stapfii

Utricularia sp.

Utricularia macrocheilos



*Utricularia subulata*

*Utricularia tortilis*

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**Linaceae**

*Hugonia planchonii*

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**Loganiaceae**

*Strychnos splendens*

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**Lythraceae**

*Rotala stagnina*

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**Malvaceae**

*Hibiscus asper*

*Hibiscus sabdariffa*

*Hibiscus* sp.

*Sida rhombifolia*

*Urena lobata*

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**Melastomataceae**

*Dissotis splendens*

*Dissotis tubulosa*

*Melastomastrum* cf. *capitatum*

*Memecylon normandii*

*Nerophila gentianoides*

*Spathandra blakeiodes*

*Warneckea fascicularis* var. *fascicularis*

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**Meliaceae**

*Trichilia djaloni*

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**Moraceae**

*Ficus* sp.

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**Ochnaceae**

*Ochna* sp.

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**Olacaceae**

*Ximenia americana*

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**Oleaceae**

*Chionanthus africanus*

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**Onagraceae**

*Ludwigia abyssinica*

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**Orchidaceae**

*Eulophia*

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**Polygalaceae**

*Polygala* sp.

Polygalaceae

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**Rubiaceae**

*Bertiera*

*Hymenodictyon floribundum*

*Oxyanthus*

*Psychotria*

Rubiaceae

Sabicea

Spermacoce

**Rutaceae**

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Zanthoxylum leprieurii  
Zanthoxylum viride

**Scrophulariaceae**

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Alectra sessiliflora  
Buchnera bowalensis  
Crepidorhopalon gracile  
Crepidorhopalon gracilis  
Dopatrium senegalense  
Striga asiatica  
Striga klingii

**Sterculiaceae**

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Waltheria indica

**Thymelaeaceae**

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Gnidia foliosa

**Tiliaceae**

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Grewia lasiodiscus

**Vitaceae**

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Cissus rubiginosa

**Xyridaceae**

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Xyris  
Xyris decipiens