

TIPAs Guinea Darwin Project report

Field expedition to Fouta Djalon 14-27 October 2016

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Introduction

A two week expedition to the Fouta Djalon 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 *Kotschyamichantha* 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

Asystasia buettneri
Brillantaisia lamium
Hypoestes cancellata
Lepidagathis collina

Amaranthaceae

Achyranthes aspera
Pandiaka heudelotii

Anacardiaceae

Sorindeia juglandifolia

Annonaceae

Monanthes sp.
Uvaria sofa

Burmanniaceae

Burmannia madagascariensis

Burseraceae

Santiria trimera

Cochlospermaceae

Cochlospermum planchonii

Combretaceae

Combretum molle
Terminalia glaucescens

Commelinaceae

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

Compositae

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

Connaraceae

Rourea minor

Cucurbitaceae

Momordica foetida

Cyperaceae

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

Dioscoreaceae

Dioscorea togoensis

Droseraceae

Drosera indica

Eriocaulaceae

Eriocaulon afzelianum

Eriocaulon deightonii

Eriocaulon pulchellum

Eriocaulon remotum

Eriocaulon sessile

Mesanthemum sp.

Mesanthemum prescottianum

Mesanthemum tuberosum

Euphorbiaceae

Antidesma membranaceum

Margaritaria discoidea

Uapaca togoensis

Fern

Fern sp.

Flacourtiaceae (Salicaceae)

Flacourtia vogelii

Gentianaceae

Djaloniella ypsilostyla
Neurotheca loeselioides
Sebaea luteo-alba

Gramineae

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 unioloides
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

Hypericaceae

Psorospermum febrifugum

indet.

Indet.

Labiatae

Aeollanthus paradoxus

Aeollanthus pubescens

Clerodendrum umbellatum

Labiatae

Mesosphaerum suaveolens

Plectranthus monostachyus subsp. lateriticola

Plectranthus sp. nov. Gangan

Vitex doniana

Lecythydaceae

Napoleonaea cf. heudelotii

Leguminosae

Leguminosae sp.

Leguminosae-Caesalpinioideae

Chamaecrista mimosoides

Piliostigma thonningii

Senna obtusifolia

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

Lentibulariaceae

Genlisea stapfii

Utricularia sp.

Utricularia macrocheilos

Utricularia subulata

Utricularia tortilis

Linaceae

Hugonia planchonii

Loganiaceae

Strychnos splendens

Lythraceae

Rotala stagnina

Malvaceae

Hibiscus asper

Hibiscus sabdariffa

Hibiscus sp.

Sida rhombifolia

Urena lobata

Melastomataceae

Dissotis splendens

Dissotis tubulosa

Melastomastrum cf. *capitatum*

Memecylon normandii

Nerophila gentianoides

Spathandra blakeiodes

Warneckea fascicularis var. *fascicularis*

Meliaceae

Trichilia djaloni

Moraceae

Ficus sp.

Ochnaceae

Ochna sp.

Olacaceae

Ximenia americana

Oleaceae

Chionanthus africanus

Onagraceae

Ludwigia abyssinica

Orchidaceae

Eulophia

Polygalaceae

Polygala sp.

Polygalaceae

Rubiaceae

Bertiera

Hymenodictyon floribundum

Oxyanthus

Psychotria

Rubiaceae

Sabicea

Spermacoce

Rutaceae

Zanthoxylum leprieurii
Zanthoxylum viride

Scrophulariaceae

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

Sterculiaceae

Waltheria indica

Thymelaeaceae

Gnidia foliosa

Tiliaceae

Grewia lasiodiscus

Vitaceae

Cissus rubiginosa

Xyridaceae

Xyris
Xyris decipiens