



Presented by: Manfred Finckh

# Online presentation of vegetation monitoring data from BIOTA Biodiversity Observatories





Federal Ministry of Education and Research

Gerhard Muche<sup>1</sup>, Manfred Finckh<sup>2</sup>, Thomas Hillmann<sup>3</sup>

Biodiversity, Evolution and Ecology of Plants, Biocentre Klein Flottbek and Botanical Garden, University of Hamburg, Ohnhorststr. 18, 22609 Hamburg, Germany <sup>1</sup>gerhard.muche@botanik.uni-hamburg.de; <sup>2</sup>mfinckh@botanik.uni-hamburg.de; <sup>3</sup>thomas.hillmann@botanik.uni-hamburg.de

# Introduction

Since the start of the BIOTA AFRICA initiative nine years ago, a huge amount of vegetation data has been collected from standardised biodiversity observatories. Time series of vegetation data are available which have been collected in plots of different sizes as well as in nested locations. Presenting such data on a webpage is however a challenge. Therefore, we developed a solution that allows free and continuous access to vegetation monitoring data. At the moment, the data of two Biodiversity Observatories of BIOTA Maroc, Taoujgalt (TAO) and EI Miyit (EMY), can be visited online.

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## Data access

**1)** From the BIOTA AFRICA homepage, the visitor can easily reach the fact sheets of the biodiversity observatories. These fact sheets provide baseline information about the observatories.

### http://www.biota-africa.org > BIOTA Maroc > EI Miyit (EMY)

OTA Maroc El Miyit							
A Start Star	Observatory No.	101				RIOTA	
	Google Earth	Show observatory in Google Earth					
	Alternative name	EMY					1.
and the second state of the second state of the second state of the	Location	Sedementary Antiatlas					
the state of the state of the state of the state of the	Province	Zagora					Data
	Owner / Institution	Commune de Tamegroute					Permanent plot habitats
- The Martin MARTIN States	Land tenure	Communal Land					Vegetation
The second second state and the	Vegetation unit	Acacia raddiana Savanna					
	Precipitation per year	52 mm					
The strength of the second	BIOTA Weather Station	GLOWA-IMPETUS, test site EMY					back to
	Local contact	Mohamed Khalil				BIOTA Morocco	
	Scientific contact	Dr. M. Finckh				Regional networks	
	Main research	Vegetation diversity at different scales				Regional networks	
	Biodiversity Observatory						
			Latitude	Longitude	Altitude (m)		
	El Miyit	EMY	30.36741	-5.63236	725 m - 75	-	
	Exclosure experiment						
A state and the state of the st			Latitude	Longitude	Altitude (m)		
The second se	FLMivit	EMY-Excl	30 36474	-5 62471	745 m	-	

2) From there a mouse click leads directly to the vegetation page of that observatory. The webpage shows an interactive map which divides the observatory into 100 hectares and which shows details about habitat features symbolised by different colours. Numbers indicate the rank of each hectare and, thus, the sampling priority.



	Above Below
Vegetation	
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Datao	Stru Plot Ran Hab
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and a second	Permanent plot					
			Latitude	Longitude	Altitude (m)	
site EMY	El Miyit	EMYAR	30.36531	-5.62318	745 m	-
iver BIOTA observatory EMY	El Miyit	EMYAN	30.36530	-5.62341	745 m	-
	El Miyit	EMYAS	30.36516	-5.62301	745 m	-
	El Miyit	EMYZR	30.36474	-5.62471	745 m	-
	El Miyit	EMYZN	30.36467	-5.62465	745 m	-
	El Miyit	EMYZS	30.36444	-5.62458	745 m	-
	Photo album					
	Photo a	<u>ilbum</u>				

5	<u>6</u>	<u>23</u>	<u>24</u>	<u>32</u>	<u>80</u>	<u>99</u>	<u>67</u>	<u>56</u>	<u>46</u>	<u>57</u>
6	<u>10</u>	<u>76</u>	1	<u>84</u>	<u>59</u>	<u>30</u>	2	<u>31</u>	<u>73</u>	<u>15</u>
7	<u>14</u>	<u>12</u>	<u>51</u>	3	<u>50</u>	<u>97</u>	<u>81</u>	<u>42</u>	<u>93</u>	<u>33</u>
8	<u>62</u>	<u>11</u>	<u>8</u>	<u>95</u>	<u>36</u>	<u>91</u>	<u>61</u>	<u>66</u>	<u>79</u>	<u>20</u>
9	<u>58</u>	<u>96</u>	<u>5</u>	<u>98</u>	<u>100</u>	<u>52</u>	<u>94</u>	<u>68</u>	<u>86</u>	<u>82</u>

**3)** If the user wants further information on plot number, ranking and geographical coordinates he only has to click on the ranking number in the map.



4) The user can browse for hectares and years in which vegetation surveys have been performed. In a query form he can select year and plot size. Again an interactive map of the observatory grid will appear, this time indicating the species richness of the plots in the respective year.

Search for species and species richness pattern									
Plotsize: 100-2006 🛛 🖌 Identifi	ed 🔽	Plotsize: 100-2008	~	Identified	~				

### Species list for hectar: 71 Year: 2006 Plotsize: 100 Species type: Identified Habitat: Reg

### 1 Aizoon canariense L.

- 2 Diplotaxis pitardiana Maire
- 3 Fagonia longispina Batt.
- 4 Lotus glinoides Del.
- 5 Morettia canescens Boiss.
- 6 Paronychia arabica (L.) DC.
- 7 Reseda diffusa (Ball) Ball
- 8 Sclerocephalus arabicus Boiss
- 9 Urginea nyctiflora Batt. & Trab

**5)** By clicking on a number a list with the scientific names of all occurring species will appear. The query form allows the user to filter life forms or life cycle durations. To compare the results of two queries with each other, it is possible to use a second query form independently. This feature allows the user to visualise firstly temporal changes over time, and secondly differences between plot sizes or between locations.



# Conclusions

We offer stakeholders and scientists the possibility to screen the data for interesting data sets and patterns. If they want to analyse the data thoroughly, they can order the datasets from the BIOTA Data Facility (subject to the signature of the BIOTA Data Sharing Protocol).

Biodiversity, Evolution and Ecology of Plants, Biocentre Klein Flottbek and Botanical Garden, University of Hamburg