

Data Set Number 162: Soil Color of Indigenous Knowledge Soil in Fakara/Niger 2002-2003

Identification_Information:

Citation:

Citation_Information:

Originator: Keiichi Hayashi

Publication_Date: 2005

Title: Soil Color of Indigenous Knowledge Soil in Fakara/Niger

2002-2003

Geospatial_Data_Presentation_Form: tabular digital data

Series_Information:

Series_Name: JAICAF Expert Bulletin (in Japanese)

Issue_Identification: 25 (6): 12-26

Publication_Information:

Publication_Place: Japan

Publisher: JAICAF

Online_Linkage: \\Isc-

svr01\GeoNetwork\fakaradatabase\h.keiishi\soil color of indigenous knowledge soil in fakara\Soil Color of Indigenous Knowledge Soil in Fakara.dbf

Description:

Abstract:

The objective of this study was to evaluate indigenous knowledge on soil and land. In field surveys on indigenous knowledge (IK), different land based classifications are found, especially when fallow systems are concerned. Soil classifications, which are normally based on texture and colour, can differ from these land based classes. The farmers in this survey identified each land based class on years of cultivation after fallow. For instance, there was 'farey-zeno', meaning fallow land and 'sakara', 'lali-banda', 'kwari-kwari', noted as lands of first year, 2nd year, and 3rd year of cultivation, respectively. 'kwari-zeno' means a field that has been cultivated for 4 or more years. The most common soil type in the study area was a sandy soil called 'labu-tjirey', meaning redish sandy soil.

Soil analysis showed a fertility reduction with the number of years of cultivation after fallow. Total nitrogen in kwari-zeno soils was 152 mg/kg, which was 33 mg/kg lower than that of sakara soils. Therefore, soil fertility restoration in a fallow system is quite important for sustainable agricultural production. As to fertility level of fallow land, a short fallow of 2 years showed lower fertility levels than a 4 years fallow. However, these latter soils are still less fertile than sakara soils, which are 'first year fields' that have been under fallow for more than 4 years. This indicates that soil fertility can not be restored sufficiently through a short time fallow system of less than 4 years.

Purpose: To obtain quantitative information of indigenous knowledge on soil fertility and soil fertility management practice

Time_Period_of_Content:

Time_Period_Information:

Multiple_Dates/Times:

Single_Date/Time:

Calendar_Date: September 2002

Single_Date/Time:

Calendar_Date: February 2003

Single_Date/Time:

Calendar_Date: May 2003
Currentness_Reference: REQUIRED: The basis on which the time period of content information is determined.
Status:
Progress: Complete
Maintenance_and_Update_Frequency: None planned
Spatial_Domain:
Bounding_Coordinates:
West_Bounding_Coordinate: 2.583333
East_Bounding_Coordinate: 2.866667
North_Bounding_Coordinate: 13.583333
South_Bounding_Coordinate: 13.333333
Data_Set_G-Polygon:
Data_Set_G-Polygon_Outer_G-Ring:
G-Ring_Point:
G-Ring_Latitude: 13.52775
G-Ring_Longitude: 2.66024
G-Ring_Point:
G-Ring_Latitude: 13.50950
G-Ring_Longitude: 2.77607
G-Ring_Point:
G-Ring_Latitude: 13.50219
G-Ring_Longitude: 2.63092
Keywords:
Theme:
Theme_Keyword_Thesaurus: None
Theme_Keyword: Indigenous knowledge
Theme_Keyword: Soil fertility management
Theme_Keyword: classification
Place:
Place_Keyword_Thesaurus: None
Place_Keyword: Sahel
Place_Keyword: West Africa
Place_Keyword: Niger
Place_Keyword: Fakara
Place_Keyword: Ko Dey
Place_Keyword: Tchigo Tegui
Place_Keyword: Banizoumbou
Access_Constraints: Restricteted
Use_Constraints: Restricteted
Point_of_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Keiichi Hayashi
Contact_Organization: JIRCAS
Contact_Address:
Address_Type: mailing and physical
City: 1-1 Ohwashi, Tsukuba
State_or_Province: Ibaraki
Postal_Code: 305-8686
Country: Japan
Contact_Voice_Telephone: +81-29-838-6355
Contact_Voice_Telephone: +227-20-722529/ 722626
Contact_Electronic_Mail_Address: khayash@jircas.affrc.go.jp
Contact_Electronic_Mail_Address: k.hayashi@cgiar.org
Native_Data_Set_Environment: Microsoft Excel; dBase ; ESRI ArcCatalog
9.0.0.535

Cross_Reference:

Citation_Information:

Originator: Eva Schlechta, Andreas Buerkert

Publication_Date: 2004

Title: Organic inputs and farmers? management strategies in millet fields of western Niger

Series_Information:

Series_Name: Geoderma

Issue_Identification: 121 (2004) 271289

Publication_Information:

Publisher: Elsevier

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: 348 points of 24 farms in three villages

Quantitative_Attribute_Accuracy_Assessment:

Attribute_Accuracy_Value: number of farms and soil sample

Lineage:

Process_Step:

Process_Description:

Collecte of data using soil sample

Input of data in Excel spreadsheets

and Processed in Excel

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Point

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Area point

Entity_and_Attribute_Information:

Detailed_Description:

Entity_Type:

Entity_Type_Label: Soil Color of Indigenous Knowledge Soil in Fakara

Attribute:

Attribute_Label: OID

Attribute_Definition: Internal feature number.

Attribute_Definition_Source: ESRI

Attribute_Domain_Values:

Unrepresentable_Domain: Sequential unique whole numbers that are automatically generated.

Attribute:

Attribute_Label: TERRITORY

Attribute_Definition: Name of the village

Attribute_Definition_Source: Keiichi Hayashi

Attribute:

Attribute_Label: X_COORD

Attribute_Definition: Longitude

Attribute_Definition_Source: None

Attribute:

Attribute_Label: Y_COORD

Attribute_Definition: Latitude

Attribute_Definition_Source: None

Attribute:

Attribute_Label: SITECODE

Attribute_Definition: Code of the site

Attribute_Definition_Source: Keiichi Hayashi

Attribute:

Attribute_Label: DEPTH(CM)

Attribute_Definition: Depth of soil horizon in cm
 Attribute_Definition_Source: Keiichi Hayashi
 Distribution_Information:
 Distributor:
 Contact_Information:
 Contact_Organization_Primary:
 Contact_Organization: JIRCAS
 Contact_Address:
 Address_Type: mailing and physical
 Address: Japan International Research Center for Agricultural
 Sciences (JIRCAS)
 City: Ohwashi, Tsukuba, Ibaraki
 Postal_Code: 305 8686
 Country: JAPAN
 Contact_Voice_Telephone: +81 29 838 6330
 Contact_Facsimile_Telephone: +81 29 838 6316
 Contact_Electronic_Mail_Address: head@ml.affrc.go.jp
 Contact_Instructions: http://www.jircas.affrc.go.jp
 Resource_Description: Soil color of Indigenous knowledge soil in
 Fakara
 Distribution_Liability: Data are restricted. Users who need the data
 should explore the metadata file and should contact JIRCAS via his
 physical or mailing address
 Standard_Order_Process:
 Digital_Form:
 Digital_Transfer_Information:
 Format_Name: dBase
 Format_Version_Number: 4
 Transfer_Size: 0.136
 Metadata_Reference_Information:
 Metadata_Date: 20070117
 Metadata_Contact:
 Contact_Information:
 Contact_Organization_Primary:
 Contact_Organization: ICRISATSC
 Contact_Person: AMADOU M.Laouali
 Contact_Position: Consultant
 Contact_Address:
 Address_Type: mailing and physical address
 Address: BP: 12404
 City: Niamey
 Country: Niger
 Contact_Voice_Telephone: 0022720722529
 Contact_Electronic_Mail_Address: a.m.laouali@cgiar.org
 Hours_of_Service: 8h00am - 16h00pm z+1
 Contact_Instructions: Email contact
 Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial
 Metadata
 Metadata_Standard_Version: FGDC-STD-001-1998
 Metadata_Time_Convention: local time
 Metadata_Access_Constraints: Restricted to Metadata project
 Scientists
 Metadata_Security_Information:
 Metadata_Security_Classification: Unclassified
 Metadata_Extensions:
 Online_Linkage: http://www.esri.com/metadata/esriprof80.html
 Profile_Name: ESRI Metadata Profile