



Technische
Universität
Braunschweig

Institut für
Pflanzenbiologie



Halo-nitrophilous scrubs (Pegano-Salsoletea) on Fuerteventura

Prof. Dr. Dietmar Brandes

3.1.2011

Pegano-Salsoletea on Fuerteventura

Fuerteventura (1.700 km²) is the second largest of the Canary Islands. It lies close to Africa, the climate is arid (mostly < 200 mm), the landscape of Fuerteventura is therefore dominated by semideserts. The potential natural vegetation has been almost destroyed, communities of Pegano-Salsoletea displaced the crassicaule vegetation due to their greater preadaptations to disturbances by agriculture, by cattle (goats) and even by caterpillars.

Some 18 of the shrubby species of the class Pegano-Salsoletea are indigenous, further 7 species are aliens. *Launaea arborescens* („aulaga“) is most common all over Fuerteventura. Some species like *Asteriscus sericeus*, *Convolvulus caput-medusae* or *Pulicaria burchardii* are rare and even endangered.

Communities of Peagon-Salsoletea on Fuerteventura

Chenoleo tomentosae-Suaedetum mollis Sunding 1972;
Chenoleoideo tomentosae-Salsoletum vermiculatae Reyes-Betancort et al. 2001;
Cenchro ciliaris-Launeetum arborescentis Reyes-Betancort et al. 2001;
Salsola divaricata community;
Salsola tetrandra community;
Convolvulus caput-medusae community Brandes 2002;
Pulicaria burchardica community Brandes 2004;
Andryolo variae-Asteriscetum sericei Rodríguez Delgado et al. 2000;
Polycarpo-Nicotianetum glaucae Sunding 1972;
Tropaeolo majoris-Ricinetum communis Rivas-Martínez et al. 1993;
Caloptropis procera stands.

Artemisia reptans C. Sm in Buch

(Asteraceae)



Artemisia reptans C. Sm. in Buch

(Asteraceae)



Atriplex glauca L. var. *ifniensis* (Caball.) Rivas-Mart. et al. (Chenopodiaceae)



Atriplex glauca L. var. *ifniensis* (Caball.) Rivas-Mart. & al. (Chenopodiaceae)



Chenoleoides tomentosa (Lowe) Botsch. (Chenopodiaceae)



Chenoleoides tomentosa (Lowe) Botsch. (Chenopodiaceae)



Forsskaolea angustifolia Retz.

(Urticaceae)



Fagonia cretica L.

(Zygophyllaceae)



Gymnocarpus decandrus Forssk.

(Caryophyllaceae)



Gymnocarpos decandrus Forssk.

(Caryophyllaceae)



Launaea arborescens (Batt.) Murb.

(Asteraceae)



Launaea arborescens (Batt.) Murb.

(Asteraceae)



Contracted vegetation with *Launaea arborescens*



Launaea arborescens growing at gullies



Launaea arborescens – the most frequent plant on Fuerteventura



Lycium intricatum Boiss.

(Solanaceae)



Lycium intricatum Boiss.

(Solanaceae)



Rumex lunaria L.

(Polygonaceae)



Schizogyne sericea (L. f.) DC.

(Asteraceae)



Salsola divaricata Masson ex Link in Buch (Chenopodiaceae)



Salsola divaricata Masson ex Link in Buch (Chenopodiaceae)



Salsola tetrandra Forssk.

(Chenopodiaceae)



Salsola tetrandra Forssk.

(Chenopodiaceae)



Salsola vermiculata L.

(Chenopodiaceae)



Suaeda ifniensis Caball. in Maire

(Chenopodiaceae)



Suaeda ifniensis Caball. in Maire

(Chenopodiaceae)



Suaeda mollis Delile

(Chenopodiaceae)



Suaeda mollis Delile

(Chenopodiaceae)



Asteriscus sericeus (L. f.) DC.

(Asteraceae)



Convolvulus caput-medusae Lowe

(Convolvulaceae)



Convolvulus caput-medusae is associated with other shrubs and subshrubs in communities belonging probably to the class Pegano-Salsoletea respectively to the new class Polycarpaeo niveae-Traganetea moquini. It grows on rocky plateaus covered with a shallow layer of carbonate sand in the *Convolvulus caput-medusae* – *Ononis natrix* ssp. *ramosissima* community, whereas on steep rocky slopes in direct contact to the sea it grows in the *Chenoleo tomentosae*-*Suaedetum vermiculatae*.

Convolvulus caput-medusae Lowe

(Convolvulaceae)



Pulicaria burchardii Hutch.

(Asteraceae)



Pulicaria burchardii Hutch.

(Asteraceae)



Artemisia thuscula Cav.

(Asteraceae)



Artemisia thuscula grows at all of the Canarian islands without Fuerteventura. It is now cultivated as „native“ species for ornamental purposes and is sometimes running wild (Antigua 2006).

Atriplex semibaccata R. Br.

(Chenopodiaceae)



Calotropis procera (Aiton) W. T. Aiton

(Asclepiadaceae)



Maireana brevifolia (R. Br.) P. G. Wilson (Chenopodiaceae)



Maireana brevifolia (R. Br.) P. G. Wilson (Chenopodiaceae)



Nicotiana glauca R. C. Graham

(Solanaceae)



Nicotiana glauca R. C. Graham

(Solanaceae)



Ricinus communis L.

(Euphorbiaceae)



Literature

- BRANDES, D. (2001): *Nicotiana glauca* als invasive Pflanze auf Fuerteventura. – Braunschweiger Geobotanische Arbeiten, 8: 39-57.
- BRANDES, D. (2002): *Maireana brevifolia* on Fuerteventura (Canary Islands, Spain). – <http://www.biblio.tu-bs.de/geobot/lit/maireana.pdf>
- BRANDES, D. (2002): *Convolvulus caput-medusae* Lowe on Fuerteventura (Canary Islands, Spain). – *Vieraea*, 29: 79-88.
- BRANDES, D. (2004): *Pulicaria burchardii* Hutch. (Asteraceae) – eine der seltensten Pflanzenarten im Bereich der Europäischen Gemeinschaft. – <http://www.digibib.tu-bs.de/?docid=00001535>
- BRANDES, D. (2004): *Gymnocarpus decandrus* (Caryophyllaceae) on Fuerteventura. - <http://www.biblio.tu-bs.de/geobot/gymno.pdf>
- BRANDES, D. (2005): *Calotropis procera* on Fuerteventura. - <http://www.biblio.tu-bs.de/geobot/fuerte.html>
- RODRÍGUEZ DELDAGO, O., A. GARCÍA GALLO & J. A. REYES BETANCORT (2000): Estudio fitosociológico de la vegetación actual de Fuerteventura (islas Canarias). – *Vieraea*, 28: 61-98.
- REYES-BETANCORT, A., W. WILDPRET DE LA TORRE & M. C. LEÓN ARENCIBIA (2001): The vegetation of Lanzarote (Canary Islands). – *Phytocoenologia*, 31: 185-247.

Address of the author.

Prof. Dr. Dietmar Brandes
Institute of Plant Biology, Working group of Vegetation Ecology
38023 Braunschweig
d.brandes@tu-bs.de