Report on the plants noted in the course of a trip from Luderitz Bay to Spencer Bay, January 10—21, 1974

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During January, 1974, members of the staffs of the Desert Ecological Research Unit, Transvaal Museum, Windhoek Herbarium and Water Research Institute of the C.S.I.R. undertook a trip along the coast from Luderitz Bay to Spencer Bay. A collection of plants was made and general ecological data collected.

I. General Observations

(1) At the “Schadewald” and Agate Beach, near Luderitz Bay, Salsola cf. nollothensis forms dense dwarf shrub clumps on one/two metre hummocks. On sandy flats and between the hummocks Stipagrostis subacaulis, S. hermannii plants and Mesembryanthemum hypertrophicum occurred in large numbers.

(2) On the rocky ridges north of the “Schadewald” Othonna furcata, Pelargonium spp. and three species of Salsola (Salsola aphylla, S. zeyheri and Salsola sp.) were noted. At the time the collection was made the pelargoniums were in flower and Othonna furcata was in full foliage.

(3) Stipagrostis sabulicola formed tufts or low hummocks in the dune habitat, generally a few kilometres inland.

(4) At Anichab Pan — 40 kilometres from Luderitz Bay — the following species were noted or collected:

Acanthosicyos horrida — only male plants being seen;
Capparis hereroensis — with flowers and fruits;
Eragrostis cyperoides — with seeds;
Salsola nollothensis — moderately browsed;
Salsola spp.;
Scirpus dioicus.
(5) An extensive collection was made at Hottentot Bay, yielding seven species! On rocky outcrops Lycium decumbens and a number of lichens were found, while the sandy talus slopes and shallow valleys were inhabited by species such as Didelta carnea var. tomentosa; Salsola nollothensis — growing in exposed places, even to the first terrace above the beach; Salsola sp. which formed small, compact clumps where exposure to wind-blown sand was not as great; Psilocaulon marlothii; Hypertelis angrae-pequeana and Drosanthemum luederitzii.

(6) From Hottentot Bay to Saddle Hill collections were made only along the beach, thus only Lycium decumbens, Salsola nollothensis, Stipagrostis sabulicola and blue-green algae (“window algae”), under translucent rocks, were recorded.

(7) The commonest species at Saddle Hill were Psilocaulon marlothii and Salsola sp., but Salsola nollothensis, Lycium decumbens, Othonna furcata and Hypertelis angrae-pequeana were numerous in some localities.

(8) The Saddle Hill North area, which provides a number of different habitats (ridges, enclosed valleys, talus slopes and protected and exposed flat areas) was relatively rich floristically. Salsola nollothensis formed large hummocks and two pools of brackish water supported populations of Ruppia maritima (a submerged aquatic plant) and Arthrocnemum dunense. Hypertelis angrae-pequeana took advantage of the extra moisture which dripped from the roofs of buildings. In addition to these species, the following occurred:

- Asparagus capensis var. littoralis — on the north-west side of the mountain; flowers and new growth;
- Cotyledon schaeferana — in sand-filled crevices;
- Crotalaria schultzei — in sandy patches; flowering;
- Drosanthemum luederitzii — on rocky talus slopes;
- Eragrostis cyperoides — some plants had been heavily grazed;
- Eremothamnus marlothianus;
- Juttadinteria cf. deserticola;
- Mesembryanthemum hypertrophicum — seedlings in washes;
- Limonium membranaceum — in sandy areas; seedlings present;
- Lycium decumbens — flowering;
- Othonna furcata — common on quartzite ridges;
- Osteospermum crassifolium
- Pelargonium cortusifolium;
- Tetragonia decumbens;
- Trianthema hereroensis — from the dune area east of the camp; the most southerly locality for this species.

(9) Spencer Bay and Dolphin Head. The latter is the type-locality of Jensenobotrya lossowiana and this succulent was very common in suitable localities. Most specimens were found on the lower, south-east slopes of the quartzite mountain. In addition to this species, the following were noted:
Cotyledon schaeferana — common between rocks; flowering;

Drosanthemum luederitzii;
Eragrostis cyperoides
Eremothamnus marlothianus;
Hypertelis angraec-pequenae;
Lebeckia multiflora var. parviflora
Lyctium decumbens;
Pelargonium cortusifolium;
Psilocaun marlothii;
Salsola nollothensis;
Salsola sp.;
Tetragonia decumbens — growing on the mountain above the Olavi wreck;

T. reduplicata;
Zygophyllum cordifolium;
three species of crustose lichens, two fruticose lichens and one foliose lichen.

(10) The most northerly point reached was Spencer Bay North Head (about 140 km from Luderitz Bay). The area had recently received rain (indicated by the presence of Monsonia ignorata and Stipagrostis hermannii) and many species, including Jensenobotrya lossowiana, Lebeckia multiflora and Othonna furcata were in full bloom. A watercourse leading to the small bay at the northern end of the Head supports a variety of plant communities, including a Sporobolus virginicus — Arthrocnemum dunense one.

In addition to the species mentioned above, the following were found:

Chrysanthemoides incana — found on the eastern side of the rock outcrop forming the Head;

Crotalaria schultzei;
Drosanthemum luederitzii;
Ectadium virgatum var. latifolium;
Eragrostis cyperoides;
Helichrysum obtusum var. namibense;
Limonium membranaceum;
Lyctium decumbens;
Osteospermum crassifolium;
Pteronia spinulosa;
Psilocaun marlothii;
P. namibense;
Salsola nollothensis;
Tetragonia decumbens;
Zygophyllum elavatum;
and lichens.

(11) Three species — namely Drosanthemum luederitzii, Limonium membranaceum and Psilocaun marlothii were collected from Oyster Cliffs by Mr. Martin Jackson.
II. LIST OF PLANTS COLLECTED ORRecorded

The system followed is that of MERXMÜLLER — Prodromus einer Flora von Südwestafrika, 1966-1972, J. Kramer, Lehre. In the cited collections G & R stands for Giess & Robinson. Species recorded but not collected are indicated by the note G & R obs. All species are housed in the S.W.A. Herbarium, Windhoek.

FAMILY MOLUGINACEAE
Hypertelis angraen-queuenae Friedr. — G & R 13176, 13194, 13208.

FAMILY AIZOACEAE
Drosanthemum luederitzii (Engler) Schwantes — G & R 13175, 13190, 13215.
Jensenobotrya lossowiana Herre — G & R 13168, 13207.
Mesembryanthemum hypertrophicum Dinter — G & R obs. (seedlings only found).
Psilocaulon marlothii (Pax) Friedr. — G & R 13164, 13182, 13213, 13223.
Psilocaulon namibense (Marl.) Friedr. — G & R 13186, 13209.
Trianthema hereroense Schinz — G & R 13202.

FAMILY TETRAGONIACEAE
Tetragonia decumbens Miller — G & R 13191, 13200.
Tetragonia reduplicata Welw. ex Oliver — G & R 13193.

FAMILY CHENOPODIACEAE
Arthrocnemum dunense Moss ex Adamson — G & R 13178, 13218.
Salsola aphylla L. fil. — G & R obs.
Salsola cf. noilothensis Aellen — G & R 13165, 13237.
Salsola zeyheri Moq. — G & R obs.
Salsola spp. — G & R 13174, 13180, 13181, 13189, 13221, 13228, 13229, 13230.

FAMILY CAPPARACEAE
Capparis hereroensis Schinz — G & R 13224, 13226.

FAMILY CRASSULACEAE
Cotyledon schaeferana Dinter — G & R 13204.

FAMILY FABACEAE
Crotalaria schultzei Harms — G & R 13199, 13201.
Lebeckia multiflora E. Meyer var. parviflora Schinz — G & R 13177.

FAMILY GERANIACEAE
Monsonia ignorata Merxm. & Schreiber — G & R 13187, 13203.
Pelargonium cortusifolium L'Hér. ex Aiton — G & R 13205.

FAMILY ZYGOPHYLLACEAE
Zygophyllum clavatum Schlechter & Diels — G & R 13184.
Zygophyllum cordifolium L. fil. — G & R 13206.

FAMILY PLUMBAGINACEAE
Limonium membranaceum R. A. Dyer — G & R 13171, 13179, 13214.

FAMILY PERIPLOCAEAE
Ectadium virgatum E. Meyer var. latifolium Schinz — G & R 13172.

FAMILY SOLANACEAE
Lycium decumbens Welw. ex Hiern — G & R 13166, 13211, 13220, 13222.
FAMILY ASTERACEAE
Chrysanthemoides incana (Burm. fil.) T. Norl. — G & R 13196.
Didelis carnosa (L. fil.) Aiton var. tomentosa (Less.) Roessler — G & R 13163.
Eremothannus marlothianus O. Hoffm. — G & R 13195, 13210.
Helichrysum obtusum S. Moore var. namibense Merxm. & Schreiber — G&R 13198.
Othonna furcata (Lindley) Druce — G & R 13170.

Pteronia spinulosa Phillips — G & R 13192.

FAMILY POTAMOGETONACEAE
Ruphea maritima L. — G & R 13216, 13217.

FAMILY LILIACEAE
Asparagus capensis L. var. litoralis Suesseng. & Karl — G & R 13219.

FAMILY GRAMINEAE (POACEAE)
Eragrostis cyperoides (Thunb.) Beauv. — G & R 13167.
Sporobolus virginicus (L.) Kunth — G & R 13188.
Stipagrostis hermannii (Mez) de Winter — G & R 13169, 13185, 13197, 13212.
Stipagrostis sabulicola (Pilger) De Winter — G & R 13225.
Stipagrostis subacaulis (Nees) De Winter — G & R obs.

FAMILY CYPERACEAE
Scirpus dioicus (Kunth) Boeck. — G & R 13227.

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SUMMARY

In the course of a trip from Luderitz Bay to Spencer Bay during January, 1974 42 species of plants were collected or noted. The type locality of Jensenobotrya lossowiana was re-located and this species was also found at Spencer Bay North Head (a distance of 15 km north of the only previously known locality). Localities where species were encountered as well as general observations are given.