mined according to the following arbitrary scale of diameters (∅):

Very small	—15 mm ∅
Small	15-25 mm ∅
Medium	25-35 mm ∅
Large	35-45 mm ∅
Very large	45— mm ∅

Seed capsules are divided into a number of cells, locules or segments, usually 5, 6 or 7, hence designated 5-, 6- or 7-merous. In **profile,** as seen from the side with the pedicel at the bottom, seed capsules are described as **rotund,** more or less globose or spherical in shape, except at top and bottom; or **boat-shaped,** oblong, more or less flat at top and bottom, with rounded ends. The **top** of the capsule in profile may be flat, slightly concave, slightly convex or peaked. The **face** of the seed capsule, viewed from above, may be more or less round, or elliptic, in shape.

3 Lithops bella N.E. Br. (1922) (W). **Plate 1/1-2.**

COLLECTED by Sergeant E.C. Phillips in 1920 or earlier; an attractive species appropriately named *bella* "pretty, handsome".

DISTRIBUTION: SWA/Namibia, in a narrow crescent area extending SSE from Aus, the type locality, to Witputs, and NNE towards Helmeringhausen.

DESCRIPTION: A relatively uniform species, therefore fairly easily identifiable. **Profile** truncate to slightly cordate, usually distinctly convex, sometimes ± flat; fissure 6-10 mm deep, lobes conjunct, sometimes slightly divergent at the top. **Face** flush to slightly elevated; elliptic or slightly reniform; lobes ± unequal; smooth to slightly rugose. **Margins** distinct but usually irregular with bold peninsular projections into the windows. **Windows** infrequently open, usually partly occluded by bold islands and peninsulas, and therefore reduced to a number of **channels** which are distinct and usually fairly broad and translucent, forming an irregular pattern, but occasionally quite narrow, so that the face is mostly opaque; the channels usually slightly impressed below the level of the margins, peninsulas and islands, presenting a slightly rugose surface. **Islands** distinct, mostly relatively large, up to 5 mm, and somewhat irregular in shape. **Markings** usually absent, but occasionally in the channels a few subcutaneous red lines and dots which may form a sparse broken network, barely visible without a lens.

Colours: Margins, islands and peninsulas opaque, creamy buff, beige, yellow-grey or greenish grey, sometimes pinkish. Windows or channels dark pellucid green or grey-green, sometimes with a brown or greyish red tint. Markings dull red. Shoulders as for margins, sometimes lighter.

Size: Small to medium, up to 30 x 20 mm, mostly about 20 x 15 mm. Number of heads up to 60 or more, mostly 2-6.

FLOWERS white, small to medium, up to 27 mm ∅, mostly 20-30 mm ∅. **Seed capsules** usually 5-merous (92%), otherwise (8%) mostly 6-merous. Profile boat-shaped, top ± flat; face broadly elliptic, up to 8,0 x 6,75 mm, mostly about 7,0 x 6,0 mm.

GENERAL NOTE: *Lithops bella* shares several features with *L. karasmontana* (Dint. & Schwant.) N.E. Br. and *L. eberlanzii* (Dint. & Schwant.) N.E. Br., and the combination of these three into a single species is projected.

4 Lithops dinteri Schwant. (1927) (Y).

Four varieties are recognized within this yellow-flowering species: var. *dinteri,* var. *brevis* (L. Bol.) Fearn, var. *frederici* Cole, and var. *multipunctata* De Boer. All of these occur in fairly close proximity (north or south) to the Orange River, in the area between Pofadder and Vioolsdrif where its course is predominantly east-west. Only two of these varieties are at present known to occur in SWA/Namibia.

4.1 *Lithops dinteri* Schwant. var. *dinteri* (Y). **Plate 1/3-4.**

COLLECTED by Ernst J. Rusch in August 1926, and named for Professor Moritz Kurt Dinter, who contributed so much to botanical knowledge in the course of several sojourns in South West Africa during the years 1897-1935.

DISTRIBUTION: SWA/Namibia, to the W, SW, S and SSE of Warmbad, and within 40 km of the Orange River. Type locality Witsand, SSE of Warmbad.

DESCRIPTION: Somewhat variable. **Profile** truncate, flat to slightly convex; fissure 6-10 mm deep, lobes conjunct. **Face** flush to slightly elevated; usually ± reniform; lobes ± unequal; mostly translucent; smooth. **Margins** usually distinct and fairly regular, sometimes irregularly indented. **Windows** usually completely open and translucent. **Channels** absent, or manifest only as translucent areas around the opaque smudges. **Islands** absent, or present only in the form of indistinct and irregular opaque flecks or smudges, which appear to be made up of aggregations of small dots. **Markings** in the windows rarely absent, usually 5 to 15 or more subcutaneous blood-red dots, short dashes and/or hooks, usually very distinct and prominent, but sometimes barely visible without a lens.

Colours: Margins and flecks or smudges opaque, pale buff to yellowish, greenish or pinkish grey, the margins sometimes indistinctly banded with slightly deeper colour. Windows, various shades of translucent grey or grey-green, often with a reddish tint. Markings, blood-red. Shoulders usually a little lighter than the margins.

Size: Small to medium, up to 30 x 20 mm, mostly about 20 x 15 mm. Number of heads up to 7 or more, mostly 1-3.

FLOWERS yellow, small to medium, up to 32 mm ∅, mostly 20-25 mm ∅. **Seed capsules** usually 5-merous (92%), otherwise (8%) mostly 6-merous. Profile boat-shaped, top ± flat, occasionally slightly peaked; face broadly elliptic, up to 8,0 x 7,0 mm, mostly about 7,0 x 6,0 mm.

4.2 *Lithops dinteri* var. *multipunctata* De Boer (1966) (Y). **Plate 1/5-6.**

COLLECTED by Victor L. Pringle and A.A. Roux in May 1963. Latin *multipunctata* "having many dots".

DISTRIBUTION: SWA/Namibia, in a small area near the Orange River, SE of Warmbad (not SW, as stated in the original publication). Reports of the occurrence of this variety to the south of the Orange River, in the Cape Province, have not yet been confirmed.

DESCRIPTION: Rather variable, often a little larger than the type. **Profile** truncate, flat to slightly convex; fissure 5-12 mm deep, lobes conjunct. **Face** flush to slightly elevated; usually ± reniform; lobes ± unequal; mostly opaque; smooth to slightly rugose. **Margins** irregularly indented. **Windows** infrequently apparent, usually reduced to a number of very slightly impressed **channels**, mostly rather indistinct, but forming an irregular broken network or sometimes reduced to small translucent spots. **Islands** absent, or present only in the form of indistinct and irregular opaque areas within obscure windows, these opaque areas often made up of dotted flecks and/or smudges. **Markings** in the channels, red lines, dashes, dots, hooks, which sometimes form a broken network; sometimes the markings almost completely fill the very narrow channels.

Colours: Face buff to pale brown, beige or pinkish grey, the margins often indistinctly banded in a slightly deeper hue. Channels translucent dull grey-green, often with a reddish tint. Markings in the channels, numerous bold blood-red dots, dashes, hooks and/or lines, sometimes forming an irregular network. Shoulders greenish, yellowish or pinkish grey, duller than the margins.

Size: Small to medium, up to 33 x 22 mm, mostly about 20 x 15 mm. Number of heads up to 13 or more, mostly 2-5.

FLOWERS yellow, small to medium, up to 35 mm ∅, mostly 20-30 mm ∅. **Seed capsules** 5-merous (almost 100%). Profile boat-shaped, top ± flat; face round to broadly elliptic, up to 8,0 x 7,0 mm, mostly about 7,0 x 6,0 mm.

5 Lithops eberlanzii (Dint. & Schwant). N.E. Br. (1925) (W). **Plate 2/1-5.**

COLLECTED by Friedrich G. Eberlanz in 1923 (?), and named for him. In 1922 plants of this species were found to the south of Aus (Kuckaus-Pockenbank plains) by Professor Kurt Dinter, but he assumed them to be *L. bella* N.E. Br. Subsequently the plants from this area were published as *L. erniana* Tisch. ex Jacobs.

DISTRIBUTION: SWA/Namibia, in a large quadrangular area based approximately on Lüderitz, Aus, Witputs and a point about 40 km SW of Witputs. Type locality Kovisberg, in the Diamond Area, E of Lüderitz. Our concept of *L. eberlanzii* includes *L. erniana* Tisch. ex Jacobs., as discussed in Cole 1984b.

DESCRIPTION: Extremely variable, some specimens being mostly opaque and almost uniform in colour, others with broad unmarked translucent channels, and yet others with a strong network of fine markings; there is also a great deal of variation in the colours. **Profile** truncate to cordate, sometimes flat but usually distinctly convex; fissure 7-12 mm deep, lobes conjunct, sometimes slightly divergent at the top. **Face** flush to slightly elevated; mostly ± reniform; lobes usually unequal; mainly opaque; smooth to rugose. **Margins** usually indistinct, with irregular indentations; occasionally fairly well-defined or more regular, with bold peninsular projections into the window area. **Windows** usually occluded by islands and peninsulas, and thus reduced to a number of **channels**, occasionally fairly regular, bold and well-defined, but usually indistinct and irregularly branched, the ends of the branches tapering off into the margins; often the channels are reduced to narrow slightly impressed furrows which may be taken up almost entirely by the markings. **Islands** sometimes bold and well-defined, often indistinct and occasionally barely discernible against the background of opaque channels.

Markings sometimes absent; usually a network of slender branched lines set in the channels or furrows, very often reduced to a number of dots, hooks and/or short lines, which may be quite obscure and not visible without a lens. **Pellucid dots** very rarely present, very sparse and usually near the inner margins, not visible without a lens.

Colours: Face, margins, islands, various shades of opaque pale or dark grey-white which may be tinted with blue, mauve, pink, brown, buff, beige, yellow or green; the margins sometimes obscurely banded in a slightly deeper shade. Windows/channels, various shades of obscurely translucent pale grey tinted with blue, green, pink, brown, mauve, buff, beige or dark grey-green. Markings red, brown, orange-brown, pink or purplish, sometimes bright and bold, often dull and rather indistinct. Pellucid dots dull grey-green. Shoulders usually as for the face, but may be somewhat lighter or darker.

Size: Small to medium, up to 38 x 25 mm, mostly about 25 x 20 mm. Number of heads up to 12 or more, mostly 2-4.

FLOWERS white, medium to large, up to 37 mm ∅, mostly 25-30 mm ∅. **Seed capsules** nearly all 5-merous (98%). Profile boat-shaped, top ± flat; face