

**DESCRIPTION:** Differs mainly in colour from the type variety, occasional plants from colonies of which may not be clearly distinguishable. It is interesting to note that the colour of this variety has some similarity to that of *L. pseudotruncatella* var. *elisabethiae*, which bears a similarly very close relationship to its type variety. **Profile** truncate, flat to slightly convex; fissure 5-10 mm deep, lobes conjunct. **Face** flush, slightly reniform; lobes  $\pm$  unequal; mostly opaque; somewhat rugose. **Margins** indistinct, rather irregular. **Windows** absent, the face usually opaque, but occasionally barely discernible as very obscurely translucent. **Channels** mostly absent; instead, a system of interconnected **valleys**, narrow to broad, impressed and fairly regularly branched. **Islands** manifest as opaque areas surrounded by valleys. **Markings** set in the valleys, a number of branched lines, hooks, dashes and/or dots, sometimes forming an entire network, more often broken. **Pellucid dots** few to many, scattered irregularly over the whole face; sometimes fairly obvious, usually rather obscure and visible only with a lens; sometimes concentrated along the valleys and producing a semblance of channels.

**Colours:** Face, margins, islands, various shades of opaque milky pink, mauve or bluish pink, the margins sometimes obscurely banded in a slightly paler hue. Markings dull purple-red. Pellucid dots dull grey-green. Shoulders as for the face or duller bluish grey.

**Size:** Medium to large, up to 38 x 28 mm, mostly about 30 x 20 mm. Number of heads up to 12, mostly 2-3.

**FLOWERS** yellow, small to medium, up to 35 mm  $\varnothing$ , mostly 20-30 mm  $\varnothing$ . **Seed capsules** almost entirely 5-merous (97%). Profile boat-shaped, top  $\pm$  flat; face elliptic, up to 8,0 x 6,5 mm, mostly about 6,5 x 5,5 mm.

**17.5 *Lithops schwantesii* var. *urikosensis*** (Dint.) De Boer & Boom (1928) (Y). **Plate 14/3-6.**

**COLLECTED** by Ernst J. Rusch in August 1926, at Urikos.

**DISTRIBUTION:** SWA/Namibia, mostly in a triangular area to the W and NW of Maltahöhe, but with localities also near Duwisib, Helmeringhausen and Bethanien. Type locality Urikos, near the most north-westerly point of the range.

**DESCRIPTION:** A very distinctive colour variant, fairly easy to identify. It is intriguing to note that plants from the localities near Urikos (most northerly), Bethanie (most southerly) and Duwisib (almost in the middle), bear the closest resemblance to one another, and in fact are not distinguishable at all; whereas those from other areas are sometimes identifiable. **Profile** truncate, flat to slightly convex; fissure 6-12 mm deep, lobes conjunct. **Face** flush;  $\pm$  reniform; lobes  $\pm$  unequal; opaque; somewhat rugose. **Margins** mostly indistinct, but fairly regular. **Windows** absent, the face opaque, or only occasionally very obscurely translucent. **Channels** absent or only occasionally discernible as obscurely translucent suffusions in

the valleys; instead, usually a system of shallow **valleys**, fairly broad or reduced to narrow furrows, interconnected in a fine or coarse network. **Islands** manifest only as opaque humps surrounded by valleys or furrows. **Markings** in the valleys, a network of branched lines, dashes, hooks and/or dots, sometimes entire, sometimes broken and obscure. **Pellucid dots** usually absent or very obscure and visible only with a lens, otherwise relatively sparsely scattered over the whole face.

**Colours:** Face, margins, islands, various shades of opaque milky bluish, greenish or yellowish grey, occasionally with pink or buff tints; the margins sometimes obscurely banded in a slightly lighter or deeper hue. Channels (when visible) obscurely translucent bluish grey-green. Markings dark brownish or purplish red. Pellucid dots dull bluish grey-green. Shoulders milky bluish grey.

**Size:** Medium to large, up to 43 x 27 mm, mostly about 30 x 20 mm. Number of heads up to 15 or more, mostly 2-5.

**FLOWERS** yellow, small to medium, up to 35 mm  $\varnothing$ , mostly 20-30 mm  $\varnothing$ . **Seed capsules** usually 5-merous (93%), otherwise (7%) mostly 6-merous. Profile boat-shaped,  $\pm$  flat to very slightly convex; face elliptic to broadly elliptic, up to 9,0 x 7,5 mm, mostly about 7,5 x 6,0 mm.

**18 *Lithops vallis-mariae*** (Dint. & Schwant.) N.E. Br. (1925) (Y). **Plate 15/2-4.**

**COLLECTED** by Mrs Angela H. Beetz in 1923, on her father's farm Marienthal, i.e. "Maria-dale", hence *vallis-mariae* "valley of Maria".

**DISTRIBUTION:** SWA/Namibia, in a large quadrangular area to the north and east of Keetmanshoop, and bounded approximately by Berseba, a point some 30 km NW of Marienthal, Stampriet, and a point some 40 km N of Aroab. Type locality near Marienthal.

**DESCRIPTION:** A relatively uniform and easily identifiable species, whose characteristic feature is the very finely wrinkled top surface. **Profile** truncate, flat to slightly convex; fissure shallow, 5-10 mm deep, lobes conjunct. **Face** flush; elliptic to reniform; lobes  $\pm$  equal to distinctly unequal; opaque, the whole face very minutely wrinkled or extensively dotted with pin-pricks, these wrinkles and pin-pricks sometimes visible to the naked eye, sometimes only with a lens, occasionally not identifiable at all; slightly rugose. **Margins, windows** and **islands** absent or very obscure, islands manifest only occasionally as opaque areas surrounded by channels. **Channels** often absent, otherwise manifest as a number of impressed, obscurely translucent, dots, hooks and short lines, up to 1,0 mm wide but usually less than 0,5 mm, the ends of the lines and the dots sometimes quite deeply pitted; sometimes the lines and dots are reduced to very shallow furrows or a faint, barely impressed reticulation,

or a series of stitch-like marks around the outer margins; occasionally they are more extensive and constitute a distinctly impressed network over the whole face. **Markings** absent.

**Colours:** Face opaque pale grey-white, or grey-white tinged with creamy yellow, green, beige, pink or light brown; margins occasionally slightly more yellow or pink than the face. Channels, if present, obscurely translucent grey, pinkish grey, or pinkish brown. Shoulders slightly lighter than the face.

**Size:** Medium to large, up to 40 x 30 mm, mostly about 30 x 23 mm. Number of heads up to 10 or more, mostly 2-4.

**FLOWERS** dull straw yellow, occasionally orange-yellow, sometimes tinged with bronze or pink; small to medium, up to 30 mm  $\varnothing$ , mostly 20-25 mm  $\varnothing$ ; often exceeded in size by the sepals which project beyond the ends of the petals by 3-4 mm; and often with long pedicels raising them as much as 25 mm above the face of the plant. **Seed capsules** usually 5-merous (91%), otherwise (9%) 6- or 4-merous. Profile boat-shaped, flat, occasionally slightly convex; face broadly elliptic, up to 10,5 x 8,0 mm, mostly about 8,0 x 6,5 mm.

### 19 *Lithops wernerii* Schwant. & Jacobs. (1951) (Y). Plate 15/5-6.

**COLLECTED** by Werner Triebner, son of the late Wilhelm Triebner of Windhoek, probably in 1950, and named for him.

**DISTRIBUTION:** SWA/Namibia, at only one known locality in the south of the Erongo Mountains, to the north of Usakos (not to the SW as stated in the original description).

**DESCRIPTION:** Relatively uniform and rather distinctive, therefore fairly easily identifiable. **Profile** cordate to truncate, usually somewhat convex; fissure shallow, 4-8 mm, lobes conjunct. **Face** flush; elliptic; lobes unequal; mostly opaque; slightly rugose. **Margins** absent or very indistinct. **Windows** reduced to small pools, narrow channels or furrows. **Channels** occurring mostly as a narrow and very irregular obscurely translucent network, often bordering the markings, but occasionally broadening into irregularly shaped rather obscure **pools** up to 5 mm wide; sometimes reduced to a network of very slightly impressed **furrows** which barely accommodate the markings. **Islands** occur only as irregular opaque areas between the markings and channels. **Markings** set in the channels or furrows, usually a broken network of very fine extensively branched lines, which often extend digitately onto the shoulders; occasionally they are reduced to no more than a few indistinct dots in the narrow channels or furrows. **Pellucid dots** usually numerous, subcutaneous, scattered irregularly over the whole face, opaque and translucent areas alike.

**Colours:** Face opaque light grey or light greenish grey, sometimes pinkish or yellowish grey. Channels obscurely translucent grey-green. Markings yellowish to reddish brown. Pellucid dots dark dull grey-green. Shoulders as for the face, or a little paler.

**Size:** Very small to small, up to 24 x 18 mm, mostly about 20 x 15 mm. Number of heads up to 10 or more, mostly 2-3.

**FLOWERS** yellow, small to medium, up to 28 mm  $\varnothing$ , mostly 18-25 mm  $\varnothing$ . **Seed capsules** 6-merous (62%) or 5-merous (32%), otherwise (6%) mostly 7-merous. Profile rotund, top flat to peaked; face  $\pm$  round, up to 7,5 x 7,0 mm, mostly about 5,7 x 5,5 mm.

## 20 Taxonomic Index

This index is drawn up on the same lines as that in Cole 1973a, but, though updated to take account of more recent publications, it includes only references essential for the present work. Details of any synonyms not listed below should be sought in Cole 1973a.

### A

#### AIAISENSIS

*Lithops karasmontana* (Dint. & Schwant.) N.E. Br. var. *aiaisensis* (De Boer) Cole, comb. nov.

*L. erniana* var. *aiaisensis* De Boer in *Succulenta* 43 (1): 6-7 (Jan. 1964).

#### ANNAE

*L. gesinae* De Boer var. *annae* (De Boer) Cole in *Excelsa* 3: 45 (1973).

*L. annae* De Boer in *Succulenta* 1956 (6): 90-92 (Nov.-Dec. 1956).

*L. francisci* var. *annae* (De Boer) Fearn in *Cact. Succ. J. Amer.* 42 (2): 92 (March-April 1970).

#### ARCHERAE

*L. pseudotruncatella* (Berg.) N.E. Br. var. *archerae* (De Boer) Cole in *Excelsa* 3: 45 (1973).

*L. archerae* De Boer in *Succulenta* 46 (8): 113, 122-23 (Aug. 1967).

Friedrich's reduction of this taxon to synonymy under *L. schwantesii* Dint. in *Prodr. Fl. S.W. Afr.* 27:80 (1970) is entirely untenable. Its facial markings, flower and capsule structure, juvenile form, etc., all indicate a clear relationship to the group of *L. pseudotruncatella* (Berg.) N.E. Br.

#### AUREA

*L. fulviceps* (N.E. Br.) N.E. Br. var. *fulviceps* cv. *Aurea* in *Aloe* 22 (3): 59-60 (1985).

*L. fulviceps* f. *aurea* Shimada in *Cact. Succ. J. Amer.* 49 (6): 252-53 (1977).

#### AVOCADO CREAM

*L. eberlanzii* (Dint. & Schwant.) N.E. Br. cv. *Avocado Cream* in *Aloe* 22 (3): 59 (1985).