

discernible in the (b) form, but usually sparse and difficult to distinguish from the miniature windows.

Colours: Face, margins, islands, various shades of opaque pale milky grey, tinted with green, blue, yellow, pink or buff, the margins sometimes faintly edged in a slightly paler tint. Windows, channels, miniature windows, various shades of translucent bluish, greenish, yellowish or pinkish grey. Pellucid dots dull bluish grey-green. Shoulders as for the margins, or a little paler.

Size: Small to medium, up to 30 x 20 mm, mostly about 22 x 16 mm. Number of heads up to 20 or more, mostly 2-7.

FLOWERS yellow, occasionally bronze-yellow, with white centre, very small to small, up to 23 mm Ø, mostly 15-20 mm Ø. **Seed capsules** usually 5-merous (94%), the remainder (6%) mostly 6-merous. Profile boat-shaped, top ± flat, usually with a dark line about 1,0 mm wide, just below the edge; face broadly elliptic, up to 9,0 x 7,0 mm, mostly 7,0 x 6,0 mm.

12 *Lithops julii* (Dint. & Schwant.) N.E. Br. (1925) (W). **Plate 6/1-6.**

COLLECTED by Professor Kurt Dinter in February 1924, and named for his friend, Dr Julius Derenberg of Hamburg.

DISTRIBUTION: SWA/Namibia, in a triangular area including Karasburg in the north, and in the south, points on the Orange River some 70 km SW and SE of Warmbad. Type locality SE of Warmbad, roughly halfway between Vahldorn and Warmbad.

DESCRIPTION: Extremely variable, some specimens being opaque and almost uniform in colour, others strongly reticulated with fine impressed markings, yet others with largely open obscurely translucent windows. At least three main forms have been recognized and were even given varietal status — pallid, reticulated and fuscous — but although most colonies tend to have a majority of one or other of these, all have at least two and many have all three of them. A distinctive feature of the species is the “lip-smear”, though this is not always present. **Profile** truncate, flat to slightly convex, occasionally slightly concave; fissure 5-10 mm deep, lobes conjunct. **Face** flush; mostly ± reniform; lobes ± unequal; mostly opaque; smooth to slightly rugose. **Margins** usually distinct but irregular, with numerous indentations and peninsular projections into the window area, but sometimes rather obscure. **Windows** rarely ± open, usually occluded by a number of islands and peninsulas, therefore reduced to a system of **channels**, sometimes broad and distinct, often rather obscure, and frequently further reduced to a network of narrow slightly impressed furrows which barely accommodate the markings. **Islands** usually large, sometimes small, mostly well-defined and distinct but often obscure and indistinct against the background of opaque channels. **Markings** some-

times absent; usually a network of lines in the channels, sometimes bold and prominent, but often reduced to a number of isolated and obscure short lines, hooks and/or dots; such a line or row of dots may also occur in the lip-smear or may replace it sometimes when the latter is absent; along the inner margins, usually a fuscous lip-smear, sometimes entire and prominent, sometimes broken and obscure, occasionally absent; the fuscous suffusion of the lip-smear occurs rarely as a narrow edging all along the outer margins.

Colours: Margins and islands, opaque pale whitish grey, sometimes with a faint tint of blue, mauve, pink, buff or green. Windows/channels usually opaque grey-white, with tints of blue, mauve, pink, beige or brown, sometimes very obscurely translucent greenish grey, greenish or yellowish brown, or pinkish grey. Markings dark red, sometimes very obscure and visible only under a lens. Lip-smear dark greenish or brownish grey or beige. Shoulders as for margins and islands, or a little paler.

Size: Small to medium, up to 38 x 25 mm, mostly about 25 x 20 mm. Number of heads up to 8 or more, mostly 2-4.

FLOWERS white, medium to large, up to 43 mm Ø, mostly 25-35 mm Ø. **Seed capsules** usually 5-merous (90%), otherwise (10%) mostly 6-merous. Profile boat-shaped, top ± flat; face elliptic to narrow elliptic, up to 11,0 x 7,5 mm, mostly about 8,5 x 6,0 mm.

13 *Lithops karasmontana* (Dint. & Schwant.) N.E. Br. (1920) (W).

We recognize four varieties within this very variable species, namely var. *karasmontana*, var. *aiasisensis* (De Boer) Cole, var. *lericheana* (Dint. & Schwant.) Cole, and var. *tischeri* Cole.

13.1 *Lithops karasmontana* (Dint. & Schwant.) N.E. Br. var. *karasmontana* (W). **Plate 8/1-3.**

COLLECTED by Professor Kurt Dinter and his wife, Mrs Jutta Dinter, who discovered it in the Karas Mountains.

DISTRIBUTION: SWA/Namibia, to the W and SW of the Great Karasburg, mainly in the areas around and between Klein Karas, Grunau and northwards, and Ai-Ais. Type locality Karas Mountains, without further detail, but apparently near Klein Karas.

DESCRIPTION: Extremely variable, some specimens being opaque and uniformly coloured, others with an extensive network of narrow channels and markings, and yet others with obscurely translucent open windows; there is also a great deal of variation in the colours. In some colonies the plants tend to represent predominantly one colour or pattern form or another, but all colonies are “mixed” in some degree, and in