This article was downloaded by: [Virginia Tech Libraries]

On: 27 February 2015, At: 05:19

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK

Transactions of the Royal Society of South Africa

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/ttrs20>

ON SOME FLOWERING PLANTS FROM THE NEIGHBOURHOOD OF PORT ELIZABETH

S. Schönland Ph.D., F.R.S.S.Af.

Published online: 08 Apr 2010.

To cite this article: S. Schönland Ph.D., F.R.S.S.Af. (1910) ON SOME FLOWERING PLANTS FROM THE NEIGHBOURHOOD OF PORT ELIZABETH, Transactions of the Royal Society of South Africa, 1:2, 441-446, DOI: [10.1080/00359191009520057](http://dx.doi.org/10.1080/00359191009520057)

To link to this article: <http://dx.doi.org/10.1080/00359191009520057>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

ON SOME FLOWERING PLANTS FROM THE NEIGHBOURHOOD OF PORT ELIZABETH.

BY S. SCHÖNLAND, Ph.D., F.R.S.S.Af.

(With two figures in the text.)

During the last few years Mr. I. L. Drege, of Port Elizabeth, and Mrs. T. V. Paterson, of Redhouse, near Port Elizabeth, have supplied me with a large number of plants from their neighbourhood. Many of these were of extreme interest. Amongst them were some previously known only from other districts of Cape Colony. Many were only known to me from Ecklon and Zeyher's collections, and there were also a fair number which seemed to me undescribed. Some of these are still under consideration. In the meantime I offer herewith the descriptions of a few species which I think are undoubtedly new, and I have added a description and figure of an extremely variable species of *Polyxena* (*P. ensifolia*) which was first described and figured by Thunberg as *Mauhlia ensifolia*, but placed by many subsequent botanists under *P. pygmæa*.

ERIOSPERMUM DREGEI, SchönL., n. sp.

Fig. 1.

Tuber subovatum diam. c. 5 cm. × c. 2·5 cm., protuberantiis rotundatis munitum. Folium solitarium hysteranthum petiolatum, petiolo lanato c. 4 cm. longo, lamina late ovata apice subplicata c. 2 cm. longa c. 1·5 cm. lata supra minutissime puberula vel glabra subtus lanata, basi processu alaicorni erecto lanato c. 4 cm. longo munita, processus subdichotome ramosus ramis primariis 4–6 subverticillatis reliquis furcato-multifidis, terminalibus oblanceolatis. Pedunculus erectus simplex filiformis glaber e basi vacue bracteatus incl. racemo c. 7·5 cm. altus, racemo denso c. 1·5 cm. longo 10–15-floro, bracteis minutis ovato-acutis c. 2 mm. longis albidis rubro-carinatis, pedicellis inferioribus c. 4 mm. longis superioribus

gradatim minoribus. Flores erecto-patentes c. 5 mm. longi, petalis oblongis, exterioribus pallide viridibus marginibus albidis, interioribus albidis stria longitudinale pallide viridi ornatis. Stamina quam petala $\frac{1}{2}$ breviora filamentis late ovatis antheris minutis late ovatis. Ovarium subglobosum stylo subulato brevior. Capsula ignota.

Port Elizabeth — Mr. I. L. Drege. Flowers in March; the leaf being produced about April.

There has hitherto been only one species of *Eriospermum* described in which the leaf bears a single compound process at the base of the lamina, namely, *E. paradoxum*, Gawl., which seems to be only known from Jacquin's figure, and certainly our species comes very close to it, but in *E. paradoxum* the filaments are linear, while in our species they are broadly ovate; further, the ultimate branches of the foliar

Fig. 1.—*ERIOSPERMUM DREGEI*, Schönl.
($\frac{1}{2}$ nat. size.)

process are much finer in *E. paradoxum*, though in our species they are also sometimes finer than shown on fig. 1.

ALBUCA (§ *EU-ALBUCA*) *PATERSONIÆ*, Schönl., n. sp.

Glaberrima; bulbus globosus vel depresso-globosus 4–5 cm. diam., tunicis exterioribus albidis lævissimis apice fibrillosis. Folia 3–5 linearia canaliculato-conniventia, itaque subteretia, ad 25 cm. longa. Pedunculus teres ebracteatus 8–12 cm. longus. Racemus subcorymbosus pauciflorus, bracteis lanceolatis cuspidatis c. 10 mm. longis, pedicellis incurvis inferioribus c. 15 mm. longis superioribus gradatim minoribus. Flores erecti, petalis exterioribus c. 23 mm. longis albidis cum stria utrinque media rubescenti, interioribus c. 19 mm. longis albidis cum stria utrinque media viridi. Stamina exteriora antheris minutissimis et sterilibus; cæterum ut in subgenere.

Redhouse, near Port Elizabeth—Mrs. T. V. Paterson (No. 460), February, 1909.

This species is allied to *A. altissima*, Dryand., but is easily distinguished by its very narrow leaves, the edges of which are turned

inwards so as to nearly touch one another, and also by the terminal fibres of the bulb-tunics.

LACHENALIA ALGOENSIS, Schönl., n. sp.

Bulbus subglobosus vel depresso-globosus c. 10 mm. diam. Folia 2 sublinearia tenuia subplicata dorso convexa 14–24 cm. longa basi vaginantia, vagina 5–9 cm. longa basi albida. Pedunculus ebracteatus 10–17 cm. longus pallide viridis maculis rubridis irregulariter ornatus leviter appianatus; racemus 4–5 cm. longus 4–10 florus, floribus superioribus incompletis, bracteis minutis ovatis acuminatis, pedicellis brevissimis, floribus erecto-patentibus c. 19 mm. longis. Perianthium oblongum leviter compressum, petalis exterioribus pallide viridibus ventricosius 2 anterioribus subæqualibus, 1 posteriori quam anteriora 2 mm. longiori, tubo c. 4 mm. longo, lobis c. 12–15 mm. longis, posteriori infra apicem dorso gibboso; petalis interioribus albidis aut ætate rubescentibus ad faucem tubi insertis, quam interiora 2–4 mm. longioribus apice leviter recurvatis et emarginatis. Stamina stylusque petala paullo excedentia; filamenta alba, pollen flavum. Capsula ignota.

Port Elizabeth, I. L. Drege (No. 64); Redhouse, Mrs. T. V. Paterson (No. 92). Flowers in August.

This species is nearly allied to *L. reflexa*, Thunb., from which it is distinguished by narrow, longer, and not falcate leaves, further by a much shorter corolla-tube, besides the flowers are not yellowish. The vagina of the foliage-leaves is sometimes distinctly umbonate on the back.

POLYXENA ENSIFOLIA (Thunb.), Schönl.

Fig. 2.

Bulbus subglobosus vel ovoideus 12–30 mm. diam. Folia 2–3, infimum vaginans membranaceum nondum abest, 2 foliacea ex vaginis hypogæis ovato-acuta ensifolia vel lanceolata suberecta vel patentia utrinque glabra ad margines versus vaginas tenuiter ciliata vel lævia cæterum scabriuscula, 3–15 cm. longa. Inflorescentia corymbosa pauciflora, pedunculo 3 mm.–6 cm. longo, bracteis parvis lanceolatis albis, pedicellis 3–5 mm. longis. Perianthium tubo albo cylindrico c. 15 mm. longo semisim ad faucem dilatato, segmentis lilacinis obovato-lanceolatis obtusis 7–9 mm. longis, suberectis apice leviter recurvatis. Stamina biseriata ad faucem perianthii inserta, exteriora lobis perianthii $\frac{1}{3}$ breviora, interiora iis $\frac{2}{3}$ breviora, antheris minutis oblongis filamentis filiformibus. Ovarium trigonum oblongum compressum, stylus filiformis, stigma capitatum. Capsulam maturam non vidi.

Found near Uitenhage, Port Elizabeth, and Grahamstown ; also at Beaufort West (?).

Flowers in winter, especially June. The following specimens belong to it : Zeyher 757 (on the banks of the Bushman's River and on hills near Addo) and Schlechter 2600 (Uitenhage), I. L. Drege 43a, 119 (Port Elizabeth), Miss M. Daly and Miss M. Sole 203, and W. G. Bennie 500 (Grahamstown).

The extreme variability of this species in the shape and size of the leaves and of the length of the peduncle is remarkable. The style is dimorphous, sometimes reaching to the level of the inner stamens, in other cases reaching to the level of the outer ones. The flowers have an unpleasant though not very pronounced smell.

Fig. 2.—POLYXENA. ($\frac{1}{2}$ nat. size.)

It looks sometimes very much like *Lachenalia kunickiana*, Schlecht. (Schlechter 10471) but is quite distinct from it. I do not know, however, why Schlechter placed his plant under *Lachenalia* and not under *Polyxena* to which it seems to belong.

I have no doubt that Thunberg's plant collected between the Sundays River and Fish River, and described by him, though imperfectly, as *Mauhlia ensifolia* (Prodr., p. 60, and Flora Cap., ed. Schult., p. 308) is our plant. Unfortunately, the illustration in his Prodr. (t. 1) is very poor, and this has probably led to its being included in *Polyxena pygmaea*, Kunth., a plant of which very good illustrations were published by Jaquin (Ic. ii., t. 380), by Redouté (Lil., t. 386), and in the

Bot. Mag. (t. 554). The other illustrations quoted by Baker under *P. pygmaea* in the Flora Cap., vi., p. 421, are not known to me. Zeyher, who collected both species, referred his Lislap plant (No. 1716) rightly to *P. pygmaea*, while he referred the specimens from the neighbourhood of Uitenhage (No. 757) to *Massonia angustifolia*, Spr. It is, however, very different from this species (now known as *Polyxena angustifolia*, Bak.) as represented by Bot. Mag. (t. 736).

The chief differences between *P. pygmaea* and *P. ensifolia* are as follows : In *P. pygmaea* the tube of the corolla is three times longer than the limb, in *P. ensifolia* it is only about double the size ; in the former the limb is spreading from the base, and the segments are strongly recurved,

in the latter it is nearly upright and the segments are only slightly recurved at the apex; in *P. pygmæa* the three longer stamens nearly equal the segments, in *P. ensifolia* they are one-third shorter; moreover, in the latter the stamens are more decidedly biseriate.

MACROSTYLIS (?) PATERSONIÆ, Schönl., n. sp.

Fruticulus ramosissimus caule ramisque sub-teretibus. Ramuli squarrosi grisei densissime foliati. Folia alternantia erecto-adpressa dense imbricata brevissime petiolata acicularia subtrigona breviter mucronata dorso convexa carinata supra leviter concava ad margines minute ciliata cæterum glabra punctis glandulosis biseriatis ornata 5-7 mm. longa. Flores solitarii terminales breviter pedicellati involucrati, foliis involucri 4-5 sepalis similibus sed brevioribus. Sepala membranacea ovata subnavicularia dorso carinata ad margines minutissime ciliata 6 mm. longa persistentia. Petala spathulata mucronata 10 mm. longa lilacina erecto-patentia basi ad margines ciliata facie infra medium transversaliter puberula. Filamenta subulata 2 mm. longa antheræ oblongæ mucronatæ, stamina sterilia 0. Discus hypogynus urceolatus integerrimus supra ovarium connivens stylo perforatus. Ovarium 5-lobum lobis obtusis rotundatis; stylus brevissimus post anthesin elongatus, deinde 2 mm. longus; stigma capitatum. Cocci oblique obovati intus versus apicem oblique truncati apice bicorniculati.

Red House, Mrs. T. V. Paterson (No. 322)—Nov., 1908.

This species is obviously closely allied to both *Macrostylis*, Bartl. and Wendl. and *Euchætis*, Wendl., and if I put it under the former I do so chiefly because the style elongates after the flower has opened. On the other hand, it has a capitate stigma which is more characteristic for *Euchætis*. Then it has also the short stamens of *Euchætis*, but on the other hand, the discus overtops the ovary as in *Macrostylis*. A future monographer of the *Rutaceæ* may perhaps have to make it the type of a new genus. To show more clearly how difficult it is to place this species into either of the above genera, I append the remarks on *Macrostylis* by Bartling and Wendland (Beiträge zur Botanik, 1. Heft, Göttingen, 1824, p. 193) by which they try to emphasise the distinctions between them: "Genus et notis essentialibus et habitu facile distinguendum, solummodu *Euchætidi* affine, quæ vero staminibus brevissimis, stylo brevi post anthesin immutato, stigmatē capitato, disci hypogyni margine vix libero nec germen occultante, foliis margine impunctatis et floribus non fastigiatis abunde differt."

CRASSULA PATERSONIÆ, Schönl., n. sp.

Fruticulosa ramis erectis carnosis dense foliatus glabris teretibus internodiis 5-7 mm. longis. Folia decussata connata perfoliata late

ovata apice obtusa vel mucronulata subplana carnosae viridia margine rubra, intus versus margines punctis brunneo-rubridis ornata ad margines pilis albis retrorse ciliata, inferiora c. 25 mm. longa c. 20 mm. lata, superiora gradatim decrescentia. Inflorescentia terminalis laxae thyrsiodeae multiflora subcorymbosa pedunculo brevissimo nudo vel bracteis 2 vacuis munito c. 4 cm. longo, thyrsi c. 7 cm. longo, bracteis foliis similibus sed gradatim valde minoribus, superioribus minutis acutis c. 1 mm. longis. Flores breviter pedicellati. Sepala basi connata 1.5 mm. longa lobis ovatis c. 1 mm. longis. Petala alba basi connata ovata erecto-patentia apice recurvata 2 mm. longa. Stamina petalis paullo minora, filamentis albis subulatis antheris rubro-brunneis late oblongis; ovaria oblique ovata c. 1.2 mm. longa stylis rubridis subulatis c. 0.75 mm. longis. Squamæ minutæ cuneatæ apice rotundatæ pallide luteæ.

Cradock place near Port Elizabeth, Mr. E. E. Galpin, May, 1902; Bethelsdorp, Mrs. T. V. Paterson (No. 664), June, 1909.

Although I have known this species since the year 1902, I have hitherto abstained from describing it, as in Mr. Galpin's specimen the inflorescence had evidently been injured. It is very closely allied to *Cr. perfoliata*, Linn. f., from which it can be distinguished at a glance by its shorter and much looser inflorescence which almost resembles a corymb. *Cr. perfoliata* has, further, a much shorter calyx, yellowish submucronulate petals, rather broader squamæ and exhibits other minor differences.

LAURENTIA RADICANS, Schönl., n. sp.

Herba perennis caespitosa ramosissima ramis 2-3 cm. longis filiformibus reptantibus ad nodos radicanibus internodiis 1-3 mm. longis. Folia petiolata, petiolo applanato c. 4 mm. longo, lamina plana textura subcarnosa ovato-lanceolata acuta basi cuneata c. 6 mm. longa dorso medio leviter canaliculata, supra leviter carinata utrinque minutissime puberula. Flores versus apicem ramulorum axillares pedicellati, pedicellis tenuibus 3 mm. longis; calycis lobi 0.75 mm. longi ovato-lanceolati dorso convexi; corolla subregularis indistincte bilabialis, petalis patentibus deinde reflexis subliberis pallide roseis lanceolatis 1.5 mm. longis; stamina 1.25 mm. longa petalis basi adnata filamentis albis applanatis basi inter se liberis apicem versus connatis, antheris brunneis 0.6 mm. longis, 2 posticis seta una munitis, tubus antherarum oblique ovatus; ovarium subhemisphaericum dimerum multi-ovulatum, c. 0.5 mm. longum; stigmata 2 brevissima subreniformia; capsula apice bivalvata subhemisphaerica c. 1 mm. longa.

On damp clayey ground near Port Elizabeth; Mr. I. L. Drege, June, 1909.

This is evidently the smallest species of *Laurentia* known, and although the other species vary considerably it seems to be quite distinct. Its entire leaves and its almost free petals characterise it sufficiently.