

## REVISION OF THE GENUS PAROPSIS.

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## PART I.

*Paropsis* is probably the most numerously represented in Australia of the Coleopterous genera, and there is certainly no genus in greater need of revision or presenting greater difficulties to the task of revision. In attempting the task I cannot hope to execute it in a final manner owing to the large number of species that have been described in such fashion that it is impossible to identify them without seeing the types, and of the types there is little doubt many have perished, while the rest are so scattered over public and private collections as to preclude the examination of them by any individual reviser.

The species of this genus are extremely difficult to identify for another reason, viz., their great variability in respect of colour and markings. There is no species of which I have seen a long series in which I do not find more or less variability, and therefore it is necessary for the describer, if his work is to be of value, to base his specific distinctions almost entirely on structural characters, on form, and on sculpture.

In dealing with the enormous mass of species constituting the genus *Paropsis* the first step must necessarily be to divide the species into primary groups, and for this division I have come to the conclusion that in the main the best character to rely upon is that which Dr. Chapuis proposed for the purpose (Ann. Soc. Ent. Belg. xx.), viz., the sculpture of the elytra, for the adoption of any other character (that I have experimented with) disregards too radically the obvious affinities of species or fails by merely separating a few groups of very small extent and leaving the

great majority of the species to form one vast group. I think, however, that there is one character founded on form that may be profitably employed in constituting primary groups, viz., the shape of the prothorax, as there is a large number of species obviously allied *inter se*, the sides of whose prothorax are mucronate in front (in many instances bisinuate) and very few indeed possessing this character which there can be any hesitation in regarding as naturally allied to them. In following Dr. Chapuis' system of groups I have, however, found it desirable to modify it by somewhat increasing the number of primary groups, and also transposing the position of some of his groups, as I feel confident that the natural place of his fourth group is immediately after his first group. I propose, therefore, the following division of the genus into primary groups :—

- A. Sides of the prothorax mucronate in front (in many species bisinuate) ..... Group i.
- AA. Sides of the prothorax evenly arched.
  - B. Puncturation of the elytra without any linear arrangement ..... Group ii.
  - BB. Puncturation of the elytra more or less linear in arrangement.
    - C. About 20 more or less regular rows of punctures on each elytron.
      - D. Elytra verrucose ..... Group iii.
      - DD. Elytra devoid of verrucæ ..... Group iv.
    - CC. The linear arrangement is very partial and merely the result of several longitudinal unpunctured spaces ..... Group v.
    - CCC. About 10 defined rows of punctures on each elytron ..... Group vi.

In the above scheme Groups i. and ii. together include almost exactly the species of Dr. Chapuis' Group i.; Groups iii. and iv. together equal (again almost exactly) Dr. Chapuis' Group iv.; Groups v. and vi. equal Dr. Chapuis' Groups ii. and iii. respectively.

The present memoir begins with Group iii. I have already read a paper to the Royal Soc. of S.A. (Tr. Roy. Soc. S.A. 1894) on Dr. Chapuis' Group i. (my i. and ii.), but during the interval since its publication so many new species of that group have come into my hands that it will be desirable to deal with it afresh, and as the new material throws fresh light on and modifies a considerable part of the work there seems to be almost a necessity for rewriting my paper on it. This, however, I purpose postponing until I have finished my work on the other groups, and, therefore, I begin with the first group that has as yet received no systematic treatment.

The section of *Paropsis* to be now dealt with,—that containing the species with about 20 rows of punctures, and also with *verrucæ*, on each elytron,—is for more than one reason, the most difficult in the genus to treat satisfactorily. It is one of the two sections containing a very large number of species, the species appertaining to it are mostly obscure, closely allied and very variable, and many of those already named are described in a manner that completely defies identification.

Dr. Chapuis (*loc. cit.*) enumerates 42 species as forming this group, but there are doubtless others among the 43 species enumerated by him as unable to be referred to a definite place in *Paropsis*. Since the publication of Dr. Chapuis' memoir only 5 species have been added. Dr. Chapuis' descriptions are far from satisfactory, because they are mere diagnoses without any notes of comparison between one species and another, and because they deal with colour and marking to an extent that is misleading in dealing with variable insects. I have, however, been fortunate enough (through the courtesy of M. Sevrin, of Brussels) to secure a considerable collection of types and named specimens from Dr. Chapuis' collection, without which I could not have ventured on the present work, but even with this assistance there is an unsatisfactory number of names that I have been compelled to disregard totally as incapable of identification with any particular species; many of the descriptions annexed to them might refer to almost any species of the group.

The following species belonging to this group I feel confident that I have not seen :—

<i>convexicollis</i> , Chp.	<i>perparvula</i> , Chp.
<i>litigiosa</i> , Chp.	<i>pardalis</i> , Chp.
<i>incurva</i> , Clk.	<i>infuscata</i> , Chp.
<i>cancellata</i> , Chp.	<i>fusconotata</i> , Chp.

Concerning the following species, I feel considerable doubt. They are all more or less insufficiently described and do not appear (judged by the descriptions) to have any very salient characteristics; in fact they might be almost any of a considerable number of species before me, and it is quite possible that I have redescribed some of them ;

<i>rugulosa</i> , Boisd.	<i>corrugata</i> , Chp.
<i>coriaria</i> , Chp.	<i>rufo-nigra</i> , Chp.
<i>spilota</i> , Chp.	

*P. papulenta*, Chp., (*papulosa*, Stäl, nom. praeocc.), I believe to be founded on the same insect as *rugosa*, Chp., but Stäl's description is insufficient to furnish ground for much more than a guess.

*P. atomaria*, Oliv., is possibly a member of this group of *Paropsis* but cannot be identified by the description; moreover, it is not certain that it was taken in Australia, as Olivier's locality is "Islands of the South Seas."

*P. aspera*, Chp., attributed by its author to this group, is an extremely anomalous species of which I have a specimen from the Chapuis collection. I have, however, removed it from this group on account of the front angles of its prothorax being mucronate.

Owing to the variability and close alliance *inter se* of the *Paropsis* of this group I have found it necessary to rely for specific distinctions almost entirely on structural characters. Some preliminary remarks on the nature of these characters and on the nomenclature I have employed in recording them seems indispensable. After long and careful study I have little doubt that the most important and constant character consists in the *form* of the species. This is a character particularly difficult to utilise intelligibly in describing, but I think nevertheless that I have hit

upon a method of characterising the form that will render it practically available. The difference of form between one species and another is best observed by looking at the specimen from the *side*, and when a number of species of this group are examined they are found to present two very different types of outline; the one in which the arch of the upper outline has its summit near the front of the elytra and thence curves away continuously downwards to the apex, the other in which the summit is considerably further back. To express this distinction clearly I have called this summit of the curve the point at which the insect is at its "greatest height;" and as it is easier for the eye to determine the middle of a straight line than of a curve I have called the middle of the *lower* outline (as viewed from the side, whence it appears as a straight line) "the middle of the elytral margin." Thus I have formed two main divisions of the *Paropses* of this group on the position of the "greatest height" in relation to the "middle of the elytral margin;" it being in the one case opposite a point considerably in *front* of the "middle of the elytral margin," in the other case opposite a point just about (or a little behind) the middle. It must be noticed that this character is slightly affected by sex, the "greatest height" being usually a little further back in the female than in the male, but this does not invalidate the divisions founded upon it, as I find that even in the females of the one group the "greatest height" is markedly nearer the base of the elytra than in the males of the other group, and there are very few species sufficiently intermediate to cause any difficulty. With a little practice and comparison of specimens I think this character will be found quite easy to appreciate. This difference of form then I take as the character on which primary divisions of this group of *Paropsis* should be based, after first eliminating from the crowd of species a few possessing altogether exceptional characters on the strength of which I treat them as forming a separate division. These exceptional characters need no explanation and will be easily recognised by the student; the aggregate that they bring together is entirely artificial, but the convenience of forming it is obvious.

For secondary and tertiary divisions I have found the most valuable characters in the margins of the prothorax, and the structure of the humeral regions of the elytra. In many species the transverse convexity of the prothorax is even (independently of the evenness or otherwise of the *surface*), *i.e.*, the convexity of the disc continues unchanged to the extreme lateral margin; in the rest of the species the convexity becomes less strong on a more or less wide marginal space. In these latter I call the prothorax "explanate at the sides." On the elytra the area between the humeral callus and the lateral margin presents two aspects,—in some species being flattened (or even concave) so that (looked at from a certain point of view) there appears to be a space (roughly triangular, the humeral angle of the elytron being the apex of the triangle) on a more or less different plane from that of the general surface; in the other species this portion of the elytra continues quite uninterruptedly the general plane of the surface. I characterise the former of these aggregates as "depressed under the humeral callus."

Another character calling for remark is the relation of the marginal portion (which is the external surface of the epipleuræ) of the elytra to the disc. In most species the distinction between these is indicated by a lightly impressed ill-defined longitudinal concavity (generally most noticeable for a short space near the apex). I have called this concavity the "submarginal sulcus."

And yet another character requires comment, viz., the structure of the epipleuræ of the elytra. These consist of an inner more or less horizontal piece (generally a mere fine line in its apical half) and an external more or less vertical piece. The height of the external piece varies greatly in different species, but is very constant in the individuals of a species. Its height, however, is so difficult to express profitably in words that I have had to fall back upon characterising its indication on the upper surface. According as it is more or less high, the lateral margin is further from or nearer to the humeral callus, so that in species with the external piece of the epipleuræ greatly elevated the inner edge of the humeral callus is as far from the external margin of the elytra as

from the suture, while in others it is much nearer to the external margin.

It will be observed that in the following descriptions I have in some instances mentioned only characters in respect of which a species differs from some other to which it is closely allied and added the statement "cetera ut . . ." (an instance of this occurs in the description of *P. extranea*). I have adopted this course to avoid needless repetition, but it will be well to state explicitly here that in every such case I have carefully compared the insect on which the abbreviated description is founded with the detailed description preceding it (in the case of *P. extranea*, e.g., with the description of *P. sternalis*), and ascertained that the whole of the detailed description applies to it except in respect of the characters noted in the abbreviated description.

I divide this group of *Paropsis* (distinguished by having the sides of the prothorax neither mucronate in front nor bisinuate, and each elytron with about 20 rows of punctures and also some verrucae) then into subgroups as follows :—

- A. Species with strongly marked characters (as detailed in the tabulation of species)..... Subgroup i.
- AA. Species not referable to Section A.
  - B. The greatest height of the insect (viewed from the side) not or scarcely in front of the middle of the elytral margin.
    - C. Elytra depressed under the humeral callus..... Subgroup ii.
    - CC. Elytra not depressed under the humeral callus. Subgroup iii.
  - BB. The greatest height of the insect (viewed from the side) considerably in front of the middle of the elytral margin..... Subgroup iv.

This first part of my "Revision of the genus *Paropsis*" deals with the first three of the subgroups into which I divide the group. I begin with a tabulated statement of the distinctive characters of the species in Subgroup i., and then proceed to furnish descriptions of the new species enumerated in the tabulation. Afterwards I treat Subgroups ii. and iii. similarly. The names printed in italics are the names of those species which I have determined by studying the descriptions without having

seen an authentic type. It is possible that there may be incorrect identifications among these; but I think not since they are all species described as presenting well-marked characters.

I have to thank many friends for their courtesy in lending me their collections for study and comparison, especially Mr. Masters, to whom I fear I have given much trouble by my enquiries regarding types in the Macleay Museum, and who has done me the great favour of sending me specimens carefully compared with those types, whereby the reliability of my memoir has been vastly increased, making him really a co-worker with me in the production. I have had the privilege also of examining the following collections, viz., S.A. Museum, Agricultural Department of New South Wales and Agricultural Bureau of W. Australia, together with the collection of Mr. A. M. Lea; also numerous specimens forwarded by Mr. A. Simson, Mr. C. French, Mr. W. W. Froggatt, and the late Messrs. Olliff and Skuse.

#### TABULATION OF THE SPECIES FORMING SUBGROUP I.

- A. Prosternum not sulcate down the middle. .... *insolens*, Blackb.
- AA. Prosternum sulcate down the middle; but very wide, and scarcely narrowed in front.
  - B. Colour testaceous or red, elytra moderately punctured.
    - C. Prothorax at its widest much behind the middle.
      - D. Sides of elytra nearly vertical, a slight subhumeral depression..... *extranea*, Blackb.
      - DD. Sides of elytra slope obliquely outward, no subhumeral depression ..... *sternalis*, Blackb.
    - CC. Prothorax at its widest scarcely behind the middle..... *funerea*, Blackb.
  - BB. General colour black; elytra coarsely punctured..... *squiresensis*, Blackb.
- AAA. Prosternum normal, but other characters exceptional, as follows:—
  - B. The humeral calli elevated into large ear-like processes..... *papuligera*, Stål.
  - BB. A well-defined antemedian discal excavation on the elytra.

- C. Form oblong, very little convex..... *scabra*, Chp.
- CC. Form broadly ovate, strongly convex..... *rugosa*, Chp.
- BBB. The exceptional characters lie in the elytral epipleuræ.
- C. Epipleuræ subhorizontal ..... *armata*, Blackb.
- CC. Inner (horizontal) part of epipleuræ nearly reaches the apex as a distinct ledge.
- D. Basal ventral segment coarsely punctured.
- E. Sides of prothorax strongly explanate.
- F. Underside testaceous ..... *Chapuisi*, Blackb.
- FF. Underside black.
  - G. Interstices of elytral punctures but little rugulose..... *latipes*, Blackb.
  - GG. Interstices of elytral punctures strongly rugulose, almost concealing the punctures..... *raucipennis*, Blackb.
- EE. Sides of prothorax only slightly explanate ..... *Karattæ*, Blackb.
- DD. Basal ventral segment feebly punctulate.
- E. Elytra with a postbasal discal impression.
- F. The marginal part of elytra moderately wide and more or less vertical.
- G. Size very large (Long. 6 lines)  
suture and some vittæ black..... *graphica*, Chp.
- GG. Size much smaller (Long. 5 l.)  
suture concolorous with general surface..... *rustica*, Blackb.
- FF. The marginal part of the elytra very wide and very strongly out-sloped..... *læviventris*, Blackb.
- EE. Elytra without any postbasal impression on disc..... *sublimbata*, Chp.

P. INSOLENS, sp.nov.

- ♀. Elongato-ovalis vel sat late subparallelia, modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; subnitida; rufa, hic illic picescens; capite fortius minus crebre punctulato; prothorace quam longiori ut  $2\frac{1}{3}$  ad 1 latiori, ab apice longe ultra medium dilatato, pone

apicem haud impresso, grosse vermiculato-ruguloso et sparsim punctulato, lateribus sat arcuatis haud deplanatis, angulis posticis rotundatis; scutello lœvi fortiter convexo; elytris sub callum humerale vix depresso, pone basin haud impressis, antice suturam versus subseriatim vermiculato-rugulosis (latera versus crebre confuse verrucosis), partibus elevatis quam depresso magis rufis, parte marginali a disco haud distincta (margine summo nihilominus præter modum lato), calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali subtiliter sparsissime punctulato; elytrorum epipleuris subhorizontalibus; prosterno medio haud longitudinaliter concavo. Long. 6, lat.  $4\frac{1}{5}$  lines.

Quite incapable of confusion with any other *Paropsis* known to me.

W. Australia; sent to me by Mr. French.

P. STERNALIS, sp.nov.

♀. Ovalis, modice convexa, altitudine majori (a latere visa) ante elytrorum marginem medium posita; minus nitida; flavo-castanea, in prothorace maculis 4 (transversim positis) et in elytris verrucis numerosis nigris; capite crebre fortius, prothorace sat crebre fortiter (ad latera grosse), punctulatis; hoc quam longiori plus quam duplo (ut  $2\frac{4}{7}$  ad 1) latiori, ab apice longe ultra medium dilatato, pone apicem transversim vix impresso, lateribus leviter arcuatis haud deplanatis, angulis posticis rotundatis; scutello nitido fere lœvi; elytris sub callum humerale vix depresso, paullo pone basin transversim vix impressis, crebre subseriatim fortiter (quam prothorax paullo magis, ad latera quam in disco vix magis, fortiter) punctulatis, intersticiis vix rugulosis, parte marginali a disco vix distincta (sulculo submarginali sub-obsolete, apicem summum haud attingenti, apicem versus leviter impresso), calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsim subfortiter punctulato; prosterni parte concava mediana lata. Long. 4, lat. 3 lines.

Easily distinguishable by its uniform flavo-castaneous colour interrupted only by the black spots on the prothorax and verrucæ on the elytra together with its very broad prosternal longitudinal furrow, which is quite as wide as in *P. geographica*, Baly. The humeral callus is extremely feeble.

N. Territory of S. Australia.

*P. EXTRANEA*, sp.nov.

♀. Altitudine majori ad medium (vel fere pone medium) elytrorum posita; obscure brunneo-rufa, ut *P. sternalis* nigronotata; prothorace in disco minus crebre punctulato, antice fortiter angustato, lateribus fortiter rotundatis; elytrorum callo humerali sat prominenti, puncturarum interstitiis apicem versus sat rugulosis; cetera ut *P. sternalis*.

Very like *P. sternalis* but at once distinguishable from it (apart from colour) by its greatest height being not at all in front of the middle, by its prothorax being much less closely punctulate on the disc with its sides much more strongly rounded and its front part much more narrowed, and by its much better developed humeral calli.

N. S. Wales; I do not know the exact habitat.

*P. SQUIRENSIS*, Blackb.

♂. Leviter ovata; minus lata; modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium (vel etiam magis retro) posita; sat nitida; nigra vel nigropicea, capite antennis pedibus (elytrorumque verrucis non-nullorum exemplorum) plus minusve rufescentibus; capite crebre subtilius punctulato; prothorace quam longiori ut  $2\frac{1}{4}$  ad 1 latiori, ab apice ultra medium dilatato, pone apicem transversim impresso, inæqualiter (in disco puncturis majoribus cum aliis minoribus intermixtis, ad latera confertim grosse) punctulato, lateribus minus arcuatis nullomodo deplanatis, angulis posticis obtusis; scutello laevi vel vix punctulato; elytris sub callum humeralem leviter depresso, pone basin transversim impressis, crebre fortiter sat seriatim

punctulatis, verrucis numerosis sat magnis plus minusve rufescensibus confuse instructis, interstitiis antice minus (feminæ quam maris magis distincte) postice magis rugulosis, parte marginali angustissima modice distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali (maris sat fortiter feminæ subtilius) punctulato; prosterni parte concava mediana lata. Long. 3-3 $\frac{3}{4}$ , lat. 2 $\frac{1}{5}$ -2 $\frac{4}{5}$  lines.

Femina quam mas paullo magis convexa.

Easily distinguishable (among the species with the median space of the prosternum exceptionally wide) by the nearly black colour of the general surface, the elytral verrucae being slightly reddish but not conspicuously different in colour from the derm. The elytral margin viewed from the side is very sinuous (as in *strigosa* and a few other species). I have thought it well to re-describe this species as the acquisition of more specimens shows some variation from the type, especially in colour.

N. W. Australia; sent to me by Mr. Masters. [Also previously taken by the Elder Exploring Expedition.]

#### P. ARMATA, sp.nov.

♀. Sat late subovata; minus convexa, altitudine majori (a latere visa) haud ante elytrorum marginem medium posita; minus nitida; supra rufo-aurantiaca, prothorace (lateribus exceptis) scutello et elytrorum tuberculis maculisque picescentibus; subtus picescens, antennarum basi tarsisque rufis; capite sat fortiter ruguloso; prothorace quam longiori ut 2 $\frac{1}{3}$  ad 1 latiori, ab apice vix ultra medium dilatato, pone apicem transversim vix impresso, grosse vermiculato-ruguloso et sparsim punctulato, lateribus modice arcuatis haud deplanatis, angulis posticis obtusis; scutello sublævi in medio凸的; elytris sub callum humeralem depresso, pone basin transversim vix manifeste impressis, subseriatim sat fortiter punctulatis et tuberculorum conicorum seriebus 9 armatis, parte marginali angusta a disco (per sulculum subsoletum continuum) divisa, calli humeralis margine in-

terno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsius minus subtiliter punctulato; epipleuris subhorizontalibus. Long. 5, lat.  $3\frac{4}{5}$  lines.

Somewhat resembles *P. insolens*; its most striking character consists in the structure of the epipleuræ; in most *Puropses* these (as noted above) consist of an inner horizontal ledge and an external almost vertical piece, but in the present species (and even more markedly in *P. insolens*) the two pieces are narrow and scarcely distinct *inter se* and form an almost evenly continuous surface outturned so as to be obliquely subhorizontal.

N. S. Wales.

*P. CHAPUISI*, sp.nov.

♂. Late ovalis, modice convexa, altitudine majori (a latere visa) sat longe ante elytrorum marginem medium posita; minus nitida, castanea, antennis ultra medium prosterno elytrorumque verrucis infuscatis; capite crebre subtiliter punctulato; prothorace quam longiori plus quam duplo (ut  $2\frac{1}{2}$  ad 1) latiori, ab apice longe ultra medium dilatato, crebre sat subtiliter subæqualiter (sed ad latera subgrosse) punctulato, pone apicem transversim distinete impresso, lateribus sat late deplanatis sat fortiter arcuatis, angulis posticis nullis; scutello leviter sparsissime punctulato; elytris sub callum humeralem triangulariter distinete depresso, paullo pone basin leviter distinete transversim late impressis, crebre sat fortiter sat æqualiter (latera versus vix magis crasse) punctulatis, verrucis parvis nonnullis apicem versus instructis, parte marginali lata a disco (sulculo manifeste impresso sed paullo ante medium interrupto hinc ad apicem continuo) divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali haud magis distanti; epipleurarum parte interna (horizontali) fere ad apicem (ut dorsum distinctum) continua; segmento ventrali basali fortiter subgrosse punctulato, apicali emarginato, incisuræ facie postica subverticali. Long. 5, lat.  $4\frac{1}{4}$  lines.

Very distinct among its near allies by its entirely (the infuscate prosternum excepted) pale castaneous under surface in combination with a coarsely punctured basal ventral segment and widely explanate sides of prothorax. I have seen only a single specimen, which is from Dr. Chapuis' collection, and is ticketed "*papulosa*." *P. papulosa*, Er., however, is a much smaller and very differently sculptured insect, while *P. papulosa*, Stål, is also much smaller and very differently sculptured (especially in having the whole of the elytra thickly studded with verrucæ). I think Dr. Chapuis was certainly mistaken in calling this species *papulosa*. Australia.

*P. RAUCIPENNIS*, sp.nov.

♀. Late ovalis, valde convexa, altitudine majori (a latere visa) vix ante elytrorum marginem medium posita; minus nitida; castanea, prothoracis maculis nonnullis elytrorum sutura (verrucisque nonnullis) et corpore subtus (coxis abdominisque apice exceptis) nigris, antennis (basi excepta) infuscatis; capite crebre minus subtiliter punctulato; prothorace quam longiori multo plus quam duplo (fere ut  $2\frac{3}{4}$  ad 1) latiori, ab apice paullo ultra medium dilatato, crebre minus subtiliter (in disco paullo minus crebre, ad latera sat grosse) punctulato, cetera ut praecedentis (*P. Chapuisi*); scutello medio opaco confertim punctulato; elytris crebre granulato-rugulosis (sicut puncturæ vix manifestæ sunt), pone basin vix distinete impressis, cetera ut praecedentis; epipleuris et segmenti basalis ventralis sculptura ut praecedentis. Long. 5, lat.  $4\frac{1}{5}$  lines.

Differs from the preceding (apart from colour) chiefly by its evidently more transverse prothorax and the very different sculpture of its elytra, which are covered with rugulosity (chiefly transverse wrinkles and confused granules) in such fashion that the puncturation is very little noticeable except in the marginal portion. Unfortunately I have seen only a female of this species and a male of the preceding, but I have little doubt that the female of the preceding is a markedly less convex insect than this with the summit of the upper outline of the elytra (viewed from

the side) evidently nearer to the base. In both this species and the preceding the continuance of the shallow sulciform impression (which marks the distinction between the discal and marginal regions of the elytra) to the actual apex causes the appearance, when the insect is viewed from the side, of the suture being produced hindward in a short mucro.

S. Australia.

P. KARATTÆ, sp.nov.

♀. Late ovalis, modice convexa, altitudine majori (a latere visa) sat longe ante elytrorum marginem medium posita; minus nitida; castanea (prothoracis maculis nonnullis, elytrorum sutura disci margine externo et verrucis numerosis regulariter seriatim positis, corporeque subtus maculatim, nigris), antennis apicem versus infuscatis; capite prothoraceque (colore excepto) fere ut *P. Chapuisi*, sed hujus lateribus vix manifeste deplanatis; scutello puncturis nonnullis impresso; elytris sub callum humeralem triangulariter distinete depresso, pone basin vix manifeste impressis, crebre subreticulatim rugulosis sed minus distinete punctulatis, sulculo subhumerali minus determinato et ante apicem ipsum toto deficiente, calli humeralis margine interno a sutura quam ab elytrorum margine laterali manifeste magis distanti: epipleuris et segmenti basalis ventralis sculptura ut *P. Chapuisi*. Long. 5, lat.  $4\frac{1}{2}$  lines.

Distinguished among its near allies (apart from probably variable characters) by the sides of its prothorax markedly less explanate, the feebleness of the distinction between the elytral disc and margins (the submarginal sulcus failing entirely before the apex so that viewed from the side there is no appearance of a sutural projection), and the humeral callus with its inner margin considerably nearer to the lateral margin than to the suture. The sculpture of the elytra resembles that of *P. raucipennis* in consisting of rugulosity mostly concealing the puncturation but it is feebler and less granulose than in that species so that the puncturation is not quite so much obscured.

Kangaroo Island.

## P. RUSTICA, sp.nov.

♀. Ovalis, minus lata; modice convexa, altitudine majori (a latere visa) longe ante elytrorum marginem medium posita; minus nitida; rufo-brunnea (elytrorum verrucis numerosis sat æqualiter, nec regulariter seriatim, dispositis, vittulisque nonnullis indeterminatis et sternis epipleurisque, nigris; antennis apicem versus infuscatis); capite prothorace que fere ut *P. læviventris* sed hoc magis transverso (ut  $2\frac{3}{4}$  ad 1) lateribus vix deplanatis minus fortiter arcuatis; elytrorum depressione humerali, sulculo submarginali (hoc in medio minus abrupte interrupto), impressione subbasali et epipleuris ut *P. Chapuisi*; elytris sat fortiter subseriatim sat crebre punctulatis, intersticiis in disco vix (verrucis neglectis) rugulosis, parte marginali sat grosse rugulosa; segmento ventrali basali subtiliter punctulato. Long. 5, lat. 4 lines (vix).

Near *P. sublimbata*, Chp., but at once distinguishable by the very much coarser puncturation of the elytra as well as by their greatest height (viewed from the side) being markedly nearer to the front and by the elytral verrucæ being manifestly larger, more conspicuous, more numerous, and less regularly seriate. The elytral apex (viewed from the side) projects as in *P. Chapuisi*.

N. S. Wales; taken by Mr. Lea at Forest Reefs.

## P. LÆVIVENTRIS, sp.nov.

♂. Sat late ovalis, minus convexa, altitudine majori (a latere visa) paullo ante elytrorum marginem medium posita; sat nitida; castanea (elytrorum macula elongata communi anteriori verrucis nonnullis exemplorumque nonnullorum vitta indeterminata submarginali posteriori nonnullorum exemplorum scutello et sternis, nigris; antennis apicem versus infuscatis); capite dupliciter (subtiliter et minus subtiliter) sat crebre punctulato; prothorace quam longiori plus quam duplo (ut  $2\frac{1}{2}$  ad 1) latiori, ab apice sat longe ultra medium dilatato, inæqualiter (in disco medio subtilius minus crebre

in lateribus sat grosse, alibi magis crebre) punctulato, pone apicem transversim distinete impresso, lateribus leviter deplanatis sat fortiter arcuatis, angulis posticis nullis; scutello sublævi; elytris sub callum humeralem triangulariter leviter depresso, paullo pone basin leviter distinete transversim impressis, sat crebre sat distinete subseriatim (latera versus vix magis fortiter) punctulatis, interstitiis sat fortiter rugulosis, verrucis sparsis minus conspicuis series duas (in interstutiis circiter  $5^{\circ}$   $9^{\circ}$ que positis) formantibus, parte marginali callo humerali et epipleuris ut *P. Chapuisi*; segmento ventrali basali minus perspicue punctulato.

♀. Manifeste magis convexa (exempli typici sternis piceis potius quam nigris). Long.  $3\frac{4}{5}$ - $4\frac{1}{2}$ , lat.  $3-3\frac{2}{5}$  lines.

Smaller and more nitid than any of its immediate allies. Easily distinguishable by the characters specified in the tabulation and by the large blackish blotch resembling a more or less wide dilatation of the anterior one-third portion of the suture. Viewed from the side the apex of the elytra appears to project as in *P. Chapuisi*.

S. Australia ; near Adelaide.

#### TABULATION OF THE SPECIES FORMING SUBGROUP II.

- A. Inner edge of humeral callus distinctly nearer to lateral margin of elytra than to suture.
- B. Sides of prothorax more or less explanate.
- C. Elytra not having well-defined continuous costæ.
- \*D. Punctuation of elytra not particularly fine.
- E. Upper surface of elytra in general, or at least the verrucæ, black or nearly so.
- F. Explanate margins of prothorax wide (each about  $\frac{1}{3}$  of width of discal part).
- G. Postbasal impression of elytral disc feeble.

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\* In *P. exsul* the elytral punctuation is not very much finer than in the species under this letter.

- H. Prothorax at its widest notably behind the middle.
- I. Elytral puncturation (or at least its seriation) much obscured, especially behind, by close rugulosity of the interstices..... *explanata*, Chp.
- II. Elytral puncturation well defined, and seriate to apex.
- J. Legs testaceous.
  - K. Form very wide; elytra strongly rounded at sides *regularis*, Blackb.
  - KK. Form much less wide; elytra less rounded at sides ..... *comma*, Blackb.
  - JJ. Legs dark..... *sylvicola*, Blackb.
- HH. Prothorax at its widest at the middle..... *melanospila*, Chp.
- GG. Postbasal impression of elytral disc very strong..... *baldiensis*, Blackb.
- FF. Explanate margins of prothorax much narrower.
- G. Median verrucæ of prothorax scarcely defined.
- H. Prothorax dark in the middle, the sides pallid in strong contrast..... *piceola*, Chp.
- HH. Prothorax not coloured as in *piceola*.
- I. Elytral verrucæ large, all isolated, nowhere confused with interstitial rugulosity.
- J. Puncturation of prothorax not asperate.
- K. Puncturation of prothorax sparse, coarse and irregular ..... *caliginosa*, Chp.
- KK. Puncturation of prothorax much finer, closer and more even..... *pustulosa*, Blackb.
- JJ. Puncturation of prothorax very close and asperate *serpiginosa*, Er.

- II. Elytral verrucæ much less distinct, confused (especially in front) with interstitial rugulosity.
- J. Puncturation of prothorax close and asperate; form strongly convex..... *mixta*, Blackb.
- JJ. Puncturation of prothorax not close and asperate; form much less convex.
- K. Postbasal impression of elytra almost wanting ... *sordida*, Blackb.
- KK. Postbasal impression of elytra well defined ..... *foveata*, Blackb.
- GG. Median verrucæ of prothorax tuberculiform..... *verrucicollis*, Chp.
- EE. Upper surface (including verrucæ, which are very large) red or brown.
- F. Prothorax not much narrowed in front, widest at the middle ..... *montuosa*, Blackb.
- FF. Prothorax much narrowed in front, widest considerably behind middle *rosea*, Blackb.
- DD. Puncturation of elytra decidedly fine.
- E. Prothorax not much narrowed in front, widest at middle ..... *exsul*, Blackb.
- EE. Prothorax much narrowed in front, widest considerably behind middle.
- F. Size moderate (Long.  $3\frac{3}{4}$  l.) ..... *simulans*, Blackb.
- FF. Size very small (Long.  $2\frac{1}{2}$  l.)..... *abjecta*, Blackb.
- CC. Elytra with well defined continuous costæ *ferrugata*, Chp.
- BB. Sides of prothorax not at all explanate.
- C. Elytra not having a well defined transverse wheal-like ridge.
- D. Form nearly circular; elytra wider than long..... *mediocris*, Blackb.
- DD. Form less wide; elytra not wider than long.
- E. Prothorax with somewhat evenly rounded sides; only moderately narrower in front than at base.
- F. Puncturation of elytra not particularly fine and close.

- G. Disc of prothorax closely and evenly punctulate.
- H. Prothorax at its widest markedly behind the middle ..... *ruficollis*, Blackb.
- HH. Prothorax at its widest at the middle ..... *propria*, Blackb.
- GG. Disc of prothorax (especially in the middle) considerably less closely punctulate ..... *whittonensis*, Blackb.
- FF. Puncturation of elytra exceptionally fine and close.
- G. Submarginal part of elytra very distinct near apex ..... *cibrata*, Blackb.
- GG. Submarginal part of elytra not distinct ..... *declivis*, Blackb.
- EE. Prothorax widening from apex almost to base; base much wider than front margin.
- F. Puncturation of elytra not particularly fine.
  - G. Elytral verrucæ large, scarcely elevated, isolated, very nitid and black ..... *Tatei*, Blackb.
  - GG. Elytral verrucæ not as in *Tatei*.
  - H. Surface of elytra (disregarding the verrucæ) only moderately rugulose.
  - I. The elytral verrucæ inconspicuous, darker than derm and tending to be transversely elongated.
  - J. The humeral calli in their normal position.
  - K. Upper outline of elytra (viewed from the side) a strong regular curve ..... *punctata*, Marsh.
  - KK. Upper outline of elytra (viewed from the side) somewhat flattened ... *alticola*, Blackb.
  - JJ. The humeral calli exceptionally near lateral margins of the elytra ..... *Victoriae*, Blackb.

- II. The elytral verrucæ very con-
- spicuous and pallid..... *solitaria*, Blackb.
- HH. Surface of elytra (disregarding
- the verrucæ) closely granu-
- lose-rugulose even at the base *lima*, Blackb.
- FF. Puncturation of the elytra excep-
- tionally fine ..... *invalida*, Blackb.
- CC. Elytra having a well-defined transverse
- wheal-like ridge ..... *transversalis*, Blackb.
- AA. Inner edge of humeral callus equidistant
- between suture and lateral margin of elytra *exarata*, Chp.

P. COMMA, sp.nov.

Sat late subovata, modice convexa, altitudine majori (a latere visa) contra marginem medium (vel paullo magis antice) posita; sat nitida; ferruginea, capite postice prothoracis maculis 2 (his figuram comma simulantibus) et elytrorum verrucis nigris, lateribus dilutioribus, corpore subtus nigro (rufo-variegato) antennis basi excepta piceis; capite subtilius subrugulose punctulato; prothorace quam longiori ut  $2\frac{2}{5}$  ad 1 latiori, ab apice sat longe ultra medium dilatato, pone apicem transversim minus perspicue impresso, sat fortiter vix confertim (ad latera grosse rugulose) punctulato, lateribus fortiter arcuatis late leviter deplanatis, angulis posticis nullis; scutello sublævi; elytris sub callum humeralem leviter depresso, pone basin transversim leviter impressis, fortiter sat crebre subseriatim (ad latera paullo magis, postice paullo minus, grosse) punctulatis, verrucis (his a basi ad apicem continuis) elongatis cum aliis rotundatis instructis, intersticiis minus rugulosis, parte marginali lata a disco (per sulculum ante medium vix interruptum) divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali vix magis distanti; segmento ventrali basali (hoc rufo) sparsim subtilius punctulato; antennarum articulo 3<sup>o</sup> quam 4<sup>ns</sup> sat longiori. Long.  $4\frac{1}{5}$ - $4\frac{1}{2}$ , lat.  $3\frac{1}{5}$ - $3\frac{1}{2}$  lines.

Femina quam mas paullo magis convexa.

This species is superficially very much like *P. serpiginosa*, Er., from which it differs *i ter alia* by its larger size, evidently greater

convexity, more widely (though not more strongly) explanate sides of prothorax, different prothoracic markings, and especially by the extra-discal part of the elytra much wider and evidently sloping outward (in *serpiginosa* it is nearly vertical) with the humeral callus considerably more distant from the lateral margin of the elytra, as well as by the considerably longer third antennal joint (in *serpiginosa* this joint is scarcely longer than the fourth). If an example be looked at with the head directed towards the observer the mark on the observer's right resembles a comma (that on the left being of course reversed). The tails of the two marks are confluent in some examples. In *serpiginosa* the prothorax is usually without markings, but in some examples there are four more or less conspicuous blackish spots placed in a transverse row. This species is also very near *P. regularis*, Blackb., differing by its smaller size, evidently narrower form, less closely punctulate prothorax with different markings, &c.

Tasmania; sent by Mr. Simson from Launceston.

*P. SYLVICOLA*, sp.nov.

♀. Late ovalis; minus convexa, altitudine majori (a latere visa) contra vel paullo pone elytrorum medium posita; minus nitida; picea, capite prothorace (hoc plus minusve piceo-adumbrato) elytrorum maculis nonnullis (his præsertim ad latera positis) antennisque (his apicem versus infuscatis) rufo-aurantiacis; capite crebre subtilius subrugulose punctulato; prothorace quam longiori ut  $2\frac{3}{5}$  ad 1 latiori, ab apice paullo ultra medium dilatato, pone apicem transversim distinete impresso, crebre rugulose subfortiter (ad latera valde rugulose) punctulato, lateribus modice arcuatis haud deplanatis angulis posticis obtusis; scutello plus minusve punctulato; elytris sub callum humeralem distinete depresso, pone basin transversim vix impressis, crebre fortiter subseriatim (postice magis subtiliter, ad latera magis rugulose) punctulatis, verrucis lœvibus sat numerosis sat seriatim (hic illuc in costis minus distinctis positis) antice quam postice minus perspicue instructis, interstitiis subrugulosis

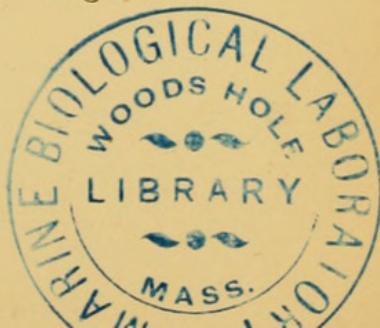
(ad latera, vix ad apicem, magis rugulosis), parte marginali minus lata sed (parte submedia excepta) a disco per sulcolum sat distinctum divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali minus sparsim minus subtiliter punctulato; antennarum articulo 3<sup>o</sup> quam 4<sup>us</sup> sat longiori. Long. 4 $\frac{1}{4}$ -4 $\frac{3}{4}$ , lat. 3-3 $\frac{1}{2}$  lines.

In general appearance much like *P. sordida*, but with the third joint of the antennæ considerably longer, the elytral puncturation stronger, the verrucæ more conspicuous (especially behind), the submarginal sulculus of the elytra strongly interrupted in front of the middle, &c. Also resembles *P. punctata*, Marsh., but differs by sides of prothorax distinctly flattened, coarser puncturation of elytra, narrower form, &c.

N. S. Wales ; taken by Mr. Lea near Forest Reefs.

*P. BALDIENSIS*, sp.nov.

♂. Sat late ovata, modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium (vel etiam magis retro) posita; nitida; subtus picea hic illic rufescens; capite prothoraceque rufis, (nonnullorum exemplorum plus minusve infuscatis) elytris piceo rufoque incerte variegatis pedibus antennisque rufis, his apicem versus infuscatis; capite crebre subtilius punctulato; prothorace quam longiori ut 2 $\frac{1}{2}$  ad 1 latiori, ab apice ad medium dilatato, pone apicem transversim minus distincte impresso, minus æquali, subtilius minus crebre (ad latera grosse rugulose) punctulato, lateribus sat æqualiter arcuatis late fortiter deplanatis, angulis posticis rotundatis; scutello fere lævi; elytris sub callum humeralem distincte depressis; pone basin transversim late fortiter impressis, sat grosse sat crebre subseriatim (ad latera paullo magis, postice multo minus fortiter) punctulatis, verrucis sat numerosis nitidis nigris sat inæqualibus in dimidia parte posteriori instructis, intersticiis (præsertim postice) rugulosis, parte marginali lata et sat late extrosum directa a disco (per sulcolum continuum) bene divisa, calli humeralis margine



interno a sutura quam ab elytrorum margine laterali parum magis distanti; segmento ventrali basali sparsius minus subtiliter punctulato. Long.  $3\frac{1}{2}$ , lat.  $2\frac{1}{2}$  lines.

The widely explanate and evenly rounded sides of the prothorax are the conspicuous character of this species, which is also notable for the strong postbasal impressions of the elytra. Two examples from Mt. Kosciusko in N. S. Wales are smaller with the prothorax a trifle more closely punctulate, but I do not think them distinct specifically. The intermediate verrucæ of the prothorax are fairly well defined.

Victoria ; M. Baldi.

P. PUSTULOSA, sp.nov.

♀. Ovalis, minus convexa, altitudine majori (a latere visa) vix ante elytrorum marginem medium posita; nitida; subitus nigra, ferrugineo-variegata; capite prothoraceque rufis, hoc transversim nigro 4-maculato; scutello obscurō; elytris rufis seriatim verrucis magnis rotundatis (sed parum elevatis) nigris ornatis; antennis pedibusque obscuris, illis basin versus rufis; capite subtiliter sat crebre punctulato; prothorace quam longiori plus quam duplo latiori (fere ut  $2\frac{1}{2}$  ad 1), ab apice paullo ultra medium dilatato, pone apicem transversim vix impresso, sparsius subtilius (ad latera sat grosse) punctulato, lateribus sat arcuatis sat anguste deplanatis, angulis posticis valde obtusis; scutello fere lœvi; elytris fortiter subseriatim sat crebre punctulatis (latera versus perspicue magis grosse), interstitiis (etiam ad apicem) parum rugulosis, sub callum humeralem distincte depresso, pone basin transversim late leviter impressis, parte marginali a disco vix distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsissime subtilissime punctulato. Long. 4, lat.  $2\frac{4}{5}$  lines.

A very nitid species, notable for the very large nitid flattish verrucæ distributed somewhat sparsely in a subseriate fashion

over the whole of its elytra, the largest of them scarcely smaller than the black spots on the prothorax.

Victoria.

P. MIXTA, sp.nov.

♀. Sat late ovata, sat convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; subnitida; nigra, capite prothoraceque rufis plus minusve nigro notatis, elytris nigro rufoque variegatis, antennarum basi rufa; capite crebre subaspere punctulato; prothorace quam longiori fere triplo latiori, ab apice fere ad basin dilatato, pone apicem transversim parum distincte impresso, confertim sat aspere minus subtiliter (ad latera magis grosse) punctulato, lateribus modice arcuatis anguste deplanatis, angulis posticis rotundatis; scutello punctulato; elytris sub callum humeralem fortiter depressis, pone basin transversim vix manifeste impressis, sat crebre sat fortiter subseriatim (ad latera magis, postice minus, fortiter) punctulatis, verrucis nigris numerosis sat distinctis subseriatim instructis, interstitiis rugulosis, parte marginali minus (apicem versus paullo magis) distincte a disco divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsius sat subtiliter punctulato. Long.  $3\frac{4}{5}$ , lat.  $2\frac{4}{5}$  lines.

Notable among its immediate allies by its very strongly transverse prothorax with close asperate even puncturation, the extremely strong depression of the elytra outside the humeral callus and the absence of any distinction between the discal and marginal parts of the elytra (except for a short distance near the apex).

Victoria; Alpine region.

P. SORDIDA, sp.nov.

Sat late ovata, minus convexa, altitudine majori (a latere visa) ad vel paullo pone elytrorum marginem medium posita; sat nitida; picea, hic illic (præsertim in capite et ad elytrorum prothoracisque latera) rufescens, antennarum basi rufa; capite

aspere sat crebre punctulato; prothorace quam longiori fere ut  $2\frac{1}{2}$  ad 1 latiori, ab apice paullo ultra medium dilatato, pone apicem transversim distincte impresso, crebrius aspere subfortiter (ad latera magis grosse) punctulato, lateribus sat arcuatis vix deplanatis, angulis posticis obtusis; scutello fere laevi; elytris sub callum humeralem distincte depresso pone basin transversim vix impressis crebre sat fortiter subseriatim (ad latera parum fortius, apicem versus magis crebre) punctulatis, verrucis nonnullis parvis minus distinctis confuse instructis, interstitiis distincte (præsertim apicem versus) rugulosis sed rugulis in disco puncturas haud obscurantibus, parte marginali sat angusta sed a disco (per sulcum continuum) bene divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsim subtiliter punctulato.

Mas quam femina paullo magis depresso, hujus antennis paullo minus elongatis. Long.  $4\cdot4\frac{1}{5}$ , lat.  $3\cdot3\frac{3}{10}$  lines.

The narrow lateral portion of the elytra divided from the discal by a continuous furrow in combination with the prothorax at its widest not much behind the middle, and the inconspicuous small verrucæ (concolorous with the derm) of the elytra forms the leading characteristic of this species among its near allies. In the female the greatest height of the elytra is a little further back than in the male.

S. Australia; Mt. Lofty, &c.

#### P. FOVEATA, sp.nov.

♀. Sat late ovalis (fere ovata), minus convexa, altitudine majori (a latere visa) paullo pone elytrorum marginem medium posita; sat nitida; ut *P. sordida* colorata; capite prothoraceque crebre subtilius leviter (in hoc ad latera puncturis sat grossis intermixtis) punctulatis; hoc quam longiori ut fere  $2\frac{1}{4}$  ad 1 latiori, ab apice paullo ultra medium dilatato, pone apicem transversim parum impresso, lateribus sat arcuatis anguste deplanatis, angulis posticis sat rotundatis; scutello plus minusve punctulato; elytris sub callum humeralem dis-

tincte depressis, pone basin transversim sat fortiter impressis, sat crebre fortius subseriatim (ad latera magis grosse) punctulatis, verrucis nonnullis minus distinctis confuse instructis, interstitiis rugulosis (in partis impressæ subbasalis fundo opacis nec rugulosis), parte marginali minus lata a disco per sulculum sat distinctum (hoc ante medium et ad apicem summum interrupto) divisa, calli humeralis margine interno a sutura quam ab elytrorum margine lateralí multo magis distanti; segmento ventrali basali sparsim fortius punctulato.

Long. 4, lat.  $2\frac{4}{5}$  lines.

Resembles *P. sordida* but is readily separated from it *inter alia* by the strongly marked subbasal impression on the elytral disc (which has somewhat the appearance of a subrotundate large shallow fovea suggestive of, though very different from, the deep fovea of *P. fossa* and *scabra*), and by the submarginal sulculus being interrupted in front of its middle and not reaching the extreme apex.

N.S. Wales; taken by Mr. Lea near Forest Reefs; also from Inverell.

#### *P. MONTUOSA*, sp.nov.

*P. baldiensi* affinis; quam hæc magis lata et multo magis convexa; elytris rufo-brunneis vix piceo-variegatis, pedibus obscuris; prothoracis disco magis crebre punctulato; elytris antice manifeste costatis, verrucis multo majoribus (cum superficie concoloribus) instructis, parte marginali minus fortiter exstorsum directa; abdomine magis crebre magis fortiter punctulato; cetera ut *P. baldiensis*. Long.  $3\frac{3}{5}$ , lat. 3 lines (vix).

Femina quam mas etiam multo magis convexa.

Rather closely allied to *P. baldiensis* structurally, though to a casual glance more suggestive of *P. rosea* and *P. impressa*, Chp. Its wider and very much more strongly convex form together with the very much larger and more elevated verrucæ of its elytra render it impossible to be confused with *baldiensis*. The greatest height of *P. baldiensis* is considerably less (of *P. montuosa* decidedly more) than half the length of the elytra. From *P.*

*rosea* the present species differs *inter alia* by the greatest width of its prothorax being at the middle, as well as by its very different colour, while from *P. impressa*, Chp., it differs very widely in form. The elytral verrucæ have more or less tendency to run together into transverse ridges, especially on the lateral declivity.

Victoria; Alpine region.

\**P. ROSEA*, sp.nov.

♀. Ovata, modice lata, altitudine majori (a latere visa) contra elytrorum marginem medium (vel etiam magis retro) posita; minus nitida; lāete rosea, antennis apicem versus et corpore subtus plus minusve infuscatis; capite crebre subfortiter punctulato; prothorace quam longiori ut  $2\frac{1}{2}$  ad 1 latiori, ab apice sat longe ultra medium dilatato, pone apicem transversim vix perspicue impresso, minus æquali, sat fortiter sat crebre (ad latera crebre grosse) punctulato, lateribus postice sat fortiter arcuatis late minus fortiter deplanatis, angulis postieis nullis; scutello fere lāevi, vel subtiliter coriaceo; elytris sub callum humeralem sat fortiter depresso, pone basin transversim fortiter impressis, sat grosse sat crebre subseriatim (postice minus grosse) punctulatis, verrucis sat magnis inæqualibus (his hic illic transversim subconjunctis) sat numerosis confuse instructis, interstitiis (præsertim transversim) inæqualiter rugulosis, parte marginali modice lata a disco (per sulculum paullo ante medium anguste interruptum) bene divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali manifeste magis distanti; segmento ventrali basali sparsius subfortiter punctulato. Long.  $3\frac{3}{5}$ , lat.  $2\frac{1}{2}$  lines.

Notable for its (probably constant) uniform bright rosy-red colouring on the upper surface. The coarse uneven verrucæ of

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\* A male example received from Mr. Masters since this description was written scarcely differs from the female except in respect of sexual characters common to all species of *Paropsis*. A female sent by Mr. Masters is somewhat larger than the type.

the elytra (tending to run together here and there into transverse ridges on the laterally declivous portions) are suggestive of *P. impressa*, Chp., from which, however, the present species differs *inter alia* by its much less convexity, its elytra at their highest much further from their base, and the much less strongly elevated verrucæ and ridges of the elytra. The intermediate verrucæ of the prothorax are fairly well-defined.

Victoria ; Black Spur : also from the Blue Mountains (Mr. Masters).

*P. exsul*, sp.nov.

♂. Late ovata, sat convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; sat nitida; picea, rufo-variegata (præsertim in capite fere toto, in prothoracis lateribus, in elytrorum marginibus et maculis indistinctis nonnullis, in antennarum basi, et in abdominis lateribus); capite crebre aspere punctulato; prothorace quam longiori ut fere  $2\frac{3}{5}$  ad 1 latiori, ab apice ad medium dilatato, pone apicem transversim vix perspicue impresso, crebre minus subtiliter (ad latera sat grosse) punctulato, lateribus sat arcuatis distinete sat anguste deplanatis, angulis posticis obtusis; scutello subtiliter punctulato; elytris sub callum humeralem distinete depresso, pone basin subrotundatim impressis, crebre sat subtiliter subseriatim (ad latera paulo minus, postice paulo magis, subtiliter) punctulatis, verrucis nonnullis vix perspicuis subseriatim instructis, intersticiis leviter (apicem versus magis perspicue) rugulosis, parte marginali modice lata a disco (per sulcum ante medium late interruptum pone medium sat profundum) bene divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paulo magis distanti; segmento ventrali basali sparsius subfortiter punctulato. Long.  $3\frac{4}{5}$ , lat. 3 lines.

Easily distinguishable among its near allies by the fine puncturation of its elytra (the verrucæ of which need looking for) in combination with the subquadrate prothorax (which is at its widest at the middle).

N.S. Wales; Richmond R. district, I believe.

## P. SIMULANS, sp.nov.

♀. Subovata; sat lata; minus convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; modice nitida; castanea, antennis apicem versus et sternis picescentibus; capite subtilius sat crebre vix aspere punctulato; prothorace quam longiori ut  $2\frac{3}{4}$  ad 1 latiori, ab apice sat longe ultra medium dilatato, pone apicem transversim impresso, sat crebre subtilius haud rugulose (sed ad latera grosse rugulose) punctulato, lateribus sat arcuatis sat anguste deplanatis, angulis posticis fere nullis; scutello laevi; elytris sub callum humeralem depresso, pone basin transversim leviter impressis, subtiliter (puncturis etiam magis subtilibus intermixtis, ad latera paulo minus postice paulo magis subtiliter) subseriatim punctulatis, verrucis sat numerosis (his minus elevatis) sparsim seriatim (basin versus obsoletis) instructis, intersticiis haud (apicem versus vix manifeste) rugulosis, parte marginali angusta a disco (per sulcolum continuum) manifeste divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paulo magis distanti; segmento ventrali basali crebrius subfortiter punctulato. Long.  $3\frac{3}{4}$ , lat.  $2\frac{4}{5}$  lines.

This species bears a remarkable superficial resemblance to *P. castanea*, Marsh., which however belongs to the last subgroup on account of its different form. Besides the difference of form from *castanea* it is distinguished *inter alia* by the much closer and more even puncturation, and much less widely explanate sides of its prothorax and by the well-marked depression below its humeral calli.

N. S. Wales ; near Sydney.

## P. ABJECTA, sp.nov.

♀. Subovata; sat lata; modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; modice nitida; obscure rufa, corpore subtus elytrisque piceo-adumbratis, antennis (exempli typici) parentibus;

capite crebre rugulose punctulato; prothorace quam longiori ut  $2\frac{1}{2}$  ad 1 latiori, ab apice sat longe ultra medium dilatato, pone apicem transversim impresso, sat crebre subrugulose subtilius (ad latera paullo magis grosse) punctulato, lateribus sat arcuatis sat anguste deplanatis, angulis posticis fere nullis; scutello subtiliter ruguloso; elytris sub callum humeralem leviter depresso, pone basin rotundatim impressis, subtilius sat crebre subseriatim (ad latera vix magis, postice vix minus, fortiter) punctulatis, verrucis sat numerosis minus distinctis subseriatim instructis, interstitiis sat rugulosis, parte marginali a disco vix distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali sat multo magis distanti; segmento ventrali basali sparsius subtilius punctulato. Long.  $2\frac{1}{2}$ , lat.  $1\frac{4}{5}$  lines.

This is an inconspicuous species bearing much superficial resemblance to *P. foveata* and *sordida* from both of which it differs by its much smaller size and the considerably finer puncturation of its elytra. It also superficially resembles *P. mediocris*, *whittonensis* and *opacior* but differs from them *inter alia* by the very distinctly though narrowly explanate sides of its prothorax.

N. S. Wales.

*P. mediocris*, sp.nov.

♂. Latissime ovata, modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; sat nitida; ut *P. exsul* colorata; capite crebre aspere punctulato; prothorace quam longiori fere triplo latiori, ab apice fere ad basin dilatato, pone apicem transversim impresso, sat crebre subfortiter (ad latera grosse) punctulato, lateribus leviter arcuatis haud deplanatis, angulis posticis nullis; scutello medio leviter punctulato; elytris sub callum humeralem manifeste depresso, pone basin transversim late distincte impressis, fortiter crebre subseriatim (ad latera paullo magis, postice paullo minus, fortiter), punctulatis, verrucis nonnullis modice distinctis nigris (his in lateribus transversim plus minusve confluentibus) instructis, interstitiis sat rugulosis (postice subgranuliformibus), parte marginali a disco (per

sulculum paullo ante medium angustius interruptum) sat bene divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paullo magis distanti; segmento ventrali basali sparsim subtilius punctulato. Long. 3, lat.  $2\frac{1}{2}$  lines.

Notable among its immediate allies for its extremely wide form and very strongly transverse prothorax. The humeral callus is more distant from the lateral margin than in most of its immediate allies.

N.S. Wales; Richmond R. district, I believe.

P. RUFICOLLIS, sp.nov.

Ovata, modice lata, modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium (vel paullo anterius) posita; sat nitida; picea, capite prothorace antennarum basi scutello elytris (horum verrucis parte suturali antica et margine summo, piceis) et corporis subtus pedumque partibus nonnullis rufis; capite crebre subtilius vix aspera punctulato; prothorace quam longiori ut  $2\frac{3}{4}$  ad 1 latiori, ab apice sat longe ultra medium dilatato, pone apicem transversim distincte impresso, minus fortiter sat crebre (ad latera grosse) punctulato, lateribus sat arcuatis haud deplanatis, angulis posticis fere nullis; scutello coriaceo vel fere lævi; elytris sub callum humeralem distincte depressis, pone basin transversim impressis, crebre minus fortiter subseriatim (ad latera magis grosse) punctulatis, verrucis sat numerosis sat seriatim instructis, interstitiis minus rugulosis, parte marginali a disco (per sulculum ante medium late interruptum) sat distincte divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali sat multo magis distanti; segmento ventrali basali subfortiter minus sparsim punctulato.

Femina quam mas paullo magis convexa, ejus antennis paullo brevioribus. Long.  $3\frac{3}{5}$ , lat.  $2\frac{2}{5}$  lines.

The (apparently constant) uniform red colouring of the head and prothorax in contrast to the much darker elytra distinguishes this species among its immediate allies. In the male the greatest

height of the elytra is a trifle nearer the front than in the female.  
N.S. Wales; taken by Mr. Lea.

P. PROPRIA, sp.nov.

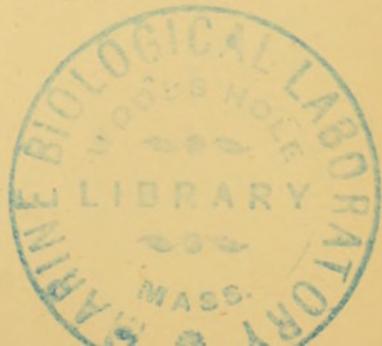
♂. Sat late ovata, sat convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; sat nitida; obscure rufo-castanea (ad latera fere sanguinea), corpore subtus antennisque plus minusve infuscatis; capite crebre sat fortiter punctulato; prothorace quam longiori ut  $2\frac{1}{2}$  ad 1 latiori, ab apice vix ultra medium dilatato, pone apicem transversim impresso, crebre sat fortiter (ut caput, sed ad latera grosse rugulose) punctulato, lateribus sat arcuatis haud deplanatis, angulis posticis distinctis obtusis; scutello crebre subtiliter punctulato; elytris sub callum humeralem distincte depresso, pone basin transversim leviter impressis, crebre fortiter subseriatim (ad latera paullo magis, postice minus, fortiter) punctulatis, verrucis nonnullis minus perspicuis (his cum superficie concoloribus) subseriatim instructis, interstitiis minus rugulosis, parte marginali sat lata a disco (per sulcillum in medio sat late interruptum) sat distincte divisa, calli humeralis margine interno a sutura quam ab elytrorum margine distincte magis distanti; segmento ventrali basali sat crebre sat fortiter punctulato.

♀. Quam mas magis convexa. Long.  $3\frac{3}{5}$ - $3\frac{4}{5}$ , lat. 3 lines.

Decidedly near *P. ruficollis*, but very distinct from it (apart from colour) *inter alia* by its prothorax at its widest *at* the middle. South Australia, widely distributed; also Kangaroo Island.

P. WHITTONENSIS, sp. nov.

♂. Ovalis, minus convexa; altitudine majori (a latere visa) ad vel paullo pone elytrorum marginem medium posita; sat nitida; supra obscure rufa, capite antice piceo, prothorace nigro- vel piceo-notato, elytris plus minusve piceo-adumbratis et verrucis nigris variegatis; subtus picea plus minusve rufescens, pedibus concoloribus, antennis pallide rufis apicem versus infuscatis; capite crebre minus subtiliter vix rugulose



punctulato; prothorace quam longiori ut  $2\frac{1}{3}$  ad 1 latiori, ab apice paullo ultra medium dilatato, pone apicem transversim distincte impresso, in disco minus fortiter minus crebre haud rugulose (ad latera grosse rugulose) punctulato, lateribus sat arcuatis haud deplanatis, angulis posticis obtusis; scutello punctulato; elytris sub callum humerale leviter depresso, pone basin vix impressis, sat crebre fortius subseriatim (ad latera magis grosse) punctulatis, verrucis sat distinctis seriatim instructis, interstitiis latera apicemque versus sat rugulosis (rugulis nonnullis transversis plus minusve elongatis et continuis latera versus intermixtis), parte marginali ut *P. foveatae*, calli humeralis margine interno ut *P. foveatae* posito; segmento ventrali basali sparsim subtilius punctulato. Long.  $3\frac{1}{5}$ , lat.  $2\frac{1}{5}$  lines.

Very much like *P. foveata* superficially, but differing from it *inter alia* by its considerably smaller size, the sides of its prothorax not at all explanate, the much more numerous and better defined verrucæ of its elytra and the extreme faintness (almost absence) of the subbasal impression of the elytra. The transverse rugulosities of the elytra have a slight tendency to simulate the continuous wheal-like ridge that forms a conspicuous character in some species of *Paropsis* (e.g., *transversalis*.)

N.S. Wales; taken by Mr. Lea near Whitton.

#### P. CRIBRATA, sp.nov.

*P. propriae* simillima; differt corpore minus nitido, elytris ad latera quam in disco vix magis rufis, horum verrucis nigris magis numerosis magis perspicue seriatis; prothorace aspero multo magis fortiter punctulato, elytris pone basin haud distincte impressis, his multo magis subtiliter (ad latera quam in disco haud magis fortiter) punctulatis; cetera ut *P. propria*. Long.  $4\frac{1}{2}$ - $4\frac{4}{5}$ , lat.  $3\frac{1}{2}$ - $3\frac{3}{5}$  lines.

Near *P. propria*, but very readily separable from it by the characters cited above; in *P. propria* the puncturation in the subbasal impression of the elytra is conspicuously coarser than on the general surface of the disc, while in the present species (there being

no distinct subbasal impression) there is no discal space notable for the coarseness of its puncturation. The whole puncturation of the elytra is manifestly finer. I have two examples of *Paropsis* differing from *P. cibrata* in their smaller size and less numerous elytral verrucæ which, moreover, are concolorous with the derm. I have little doubt that they represent a distinct very close species, but I refrain from naming them without observing more specimens.

S. Australia; Yorke's Peninsula.

**P. DECLIVIS, sp.nov.**

♀. Sat late ovata; sat fortiter convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; minus nitida; obscure rufa, antennis (basi excepta) corpore subtus pedibus capitis parte antica scutello et elytrorum verrucis piceis; *P. propriae* affinis; differt prothorace ab apice manifeste ultra medium dilatato, pone apicem (hoc magis angustato) haud impresso, angulis posticis magis rotundatis; scutello sublævi; elytris paullo magis crebre magis subtiliter punctulatis, pone basin haud impressis, verrucis vix elevatis nigris ut superficies punctulatis, parte marginali a disco haud distincta; cetera ut *P. propria*. Long. 4, lat.  $3\frac{1}{5}$  lines.

Resembles *P. propria* and *P. cibrata* but differs from both *inter alia* by the marginal portion of its elytra (especially behind) continuous with the discal portion so that there is no longitudinal concavity but the lateral and apical declivous parts descend quite evenly without being outturned at the margin. The puncturation of the elytra continuous over the verrucæ is also a notable character and very rare in *Paropsis*.

N. S. Wales; near Sydney.

**P. TATEI, sp.nov.**

♂. Ovalis, minus convexa, altitudine majori (a latere visa) ad elytrorum marginem medium posita; nitida; fere ut *P. pustulosa* colorata, sed antennis rufis apicem versus vix infuscatis et elytrorum verrucis multo minoribus elongatis; capite

subtilius crebrius subrugulose punctulato; prothorace quam longiori ut  $2\frac{2}{5}$  ad 1 latiori, antice fortiter angustato, ab apice longe pone medium dilatato, pone apicem transversim haud impresso, crebrius sat fortiter sat rugulose (ad latera valde rugulose) punctulato, lateribus modice arcuatis nullo modo deplanatis, angulis posticis valde obtusis; scutello lœvi fortiter convexo; elytris subgrosse seriatim minus crebre punctulatis (ad latera etiam grossius, apicem versus multo magis crebre), interstitiis in disco haud (ad latera et versus apicem sat perspicue) rugulosis, sub callum humeralem distincte depressis, pone basin transversim late vix impressis, parte marginali a disco haud distincta, calli humeralis margine interno a sutura quam ab elytrorum margine lateralí multo magis distanti, segmento ventrali basali sublævi. Long.  $4\frac{1}{5}$ , lat. 3 lines.

Rather closely resembling *P. pustulosa* superficially but readily distinguishable from it *inter alia* by its prothorax being not at all explanate laterally, much narrower in front and much more strongly and less smoothly punctulate; also by its elytra being evidently more coarsely and less closely punctulate, more regularly seriate, with much smaller and differently shaped verrucæ, and having their marginal part not distinct from the discal (in *pustulosa* there is an evident though very narrow lateral outturned portion especially noticeable near the apex). It should be noted that in this species the third antennal joint is slightly longer than the fourth, but too slightly to justify placing it among the species with the third joint "markedly" longer.

Victoria; presented to me by Professor Tate.

#### P. ALTICOLA, sp.nov.

Lata ovalis (fere subcircularis), minus convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; sat nitida; subtus nigro-picea; supra (antennis pedibusque inclusis) rufescens, elytris plus minusve obscure piceo-adumbbris; capite sat crebre vix aspere punctulato; prothorace quam longiori ut  $2\frac{2}{3}$  ad 1 latiori, ab apice sat longe ultra

medium dilatato, pone apicem transversim distinete impresso, crebre aspera minus fortiter (ad latera grosse nec vel vix confluenter) punctulato, lateribus fortiter arcuatis nullo modo deplanatis, angulis posticis nullis; scutello sat opaco, dupliciter (sparsim fortius et confertim subtiliter) punctulato; elytris sat distinete sub callum humeralem depresso (et pone basin transversim impressis), crebre fortius subseriatim (ad latera multo magis grosse, postice magis crebre magis subtiliter) punctulatis, verrucis nonnullis parvis minus distinctis confuse instructis, intersticiis antice modice (postice crebre sat aspera) rugulosis, parte marginali sat angusta a disco (per sulculum antemedium anguste interruptum) bene divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali vix multo magis distanti; segmento ventrali basali sat sparsim subfortiter punctulato.

Mas quam femina nonnihil magis depresso, hujus antennis paullo minus elongatis. Long.  $3\frac{1}{5}$ - $4\frac{1}{5}$ , lat.  $2\frac{2}{5}$ - $3\frac{1}{5}$  lines.

Resembles *P. sordida* superficially but differs from it by a multitude of characters, conspicuous among which are its distinctly more convex form, more transverse differently shaped prothorax, scutellum so closely punctulate as to be subopaque, and humeral callus distinctly more distant from the lateral margin of the elytra.

Also near *punctata*, Marsh., but of considerably more depressed form.

S. Australia; on the hills near Adelaide, &c.; also Kangaroo Island.

*P. VICTORIÆ*, sp nov.

♀. *P. alticola* simillima; subtus nigra, pedibus obscuris, prothorace paullo magis crebre punctulato; scutello fere lœvi; elytris ad latera quam in disco vix magis fortiter punctulatis; calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; cetera ut *P. alticola*. Long.  $3\frac{4}{5}$ , lat.  $2\frac{4}{5}$  lines.

Another species very close to *P. alticola* but differing from it in the evidently closer puncturation of its prothorax; the extremely

fine and sparse puncturation of its scutellum; a slight difference (mentioned above) in the elytral puncturation; and especially in the external (vertical) part of the elytral epipleuræ being less elevated, so that the humeral callus is nearer to the lateral margin of the elytra (being placed as in *P. sordida*). This latter character *inter alia* forms a good distinction from *P. punctata*, Marsh. I have not seen a male of this species. In the type the scutellum is very nitid, convex and scarcely punctulate; in a second example (possibly representing a distinct species) the scutellum is subopaque, being very finely coriaceous, but both examples are devoid of the comparatively coarse punctures with which the scutellum is impressed in *P. alticola* and *punctata*, Marsh. In the "second example" the elytral verrucæ are a trifle more conspicuous and less tending to run together transversely.

Victoria.

*P. SOLITARIA*, sp.nov.

♀. Elongato-ovalis, modice convexa, altitudine majori (a latere visa) paullo pone elytrorum marginem medium posita; sat nitida; subtus nigra; capite prothoraceque brunneo-rufis nigro-adumbratis; elytris piceis, verrucis numerosis seriatim positis sordide testaceis et vittis concoloribus circiter 10 ornatis; pedibus antennisque nigris, his basin versus sordide testaceis; capite subtilius sat crebre punctulato; prothorace quam longiori plus quam duplo (ut  $2\frac{3}{5}$  ad 1) latiori, ab apice longe ultra medium dilatato, pone apicem transversim vix impresso, in disco sat subtiliter minus crebre (ad latera crebre crasse) punctulato, lateribus sat arcuatis vix deplanatis, angulis posticis rotundatis; scutello lævi; elytris sat crebre subfortiter subseriatim (ad latera quam in disco vix magis fortiter) punctulatis, interstitiis in disco leviter (postice magis fortiter) rugulosis, sub callum humeralem distincte depressis, parte marginali a disco vix distincta (ut *P. sternalis*), calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsim subtiliter punctulato; antennarum articulo 3<sup>o</sup> quam

4<sup>us</sup> vix longiori; epipleurarum parte externa (verticali) minime elevata. Long. 5, lat.  $3\frac{1}{5}$  lines.

The most striking character in this species is the external (vertical) part of its elytral epipleuræ being very narrow [scarcely so wide as is the internal (horizontal) part where the latter is at its widest]. The colouring of the elytra in the unique type is also very remarkable, the derm being of a pitchy colour traversed by a number of dull testaceous vittæ on which are placed rather closely numerous concolorous verrucæ.

Victoria ; Black Spur.

P. LIMA, sp.nov.

♀. *P. alticola* affinis sed magis convexa; pedibus antennisque (harum basi excepta) obscuris; elytris crebre granuloso-rugulosis. Long. 4, lat.  $2\frac{9}{10}$  lines.

Another near ally of *P. alticola* but incapable of confusion with it on account of its much more convex form (at any rate in the female) and the strong close granule-like rugulosity of its elytral interstices which is so prominent as greatly to obscure the puncturation except in the subbasal impression. In the type this subbasal impression is almost circular, but I hesitate to attach much value to this character since the corresponding impression in *P. alticola* shows some approach (though less marked) to a similar form, the impression being subinterrupted in the middle so that its inner part (regarded separately) is scarcely transverse. From *P. punctata*, Marsh., it differs by its still more convex form, more nitid surface, and much more rugulose elytral interstices.

Victoria ; sent to me by Mr. Billinghamurst.

P. INVALIDA, sp.nov.

♀. Ovalis, parum convexa; altitudine majori (a latere visa) paullo pone elytrorum marginem medium posita; sat nitida; ut *P. sordida* colorata; capite minus crebre minus subtiliter punctulato, interstitiis valde distincte subtiliter punctulatis; prothorace fere ut *P. sordidae* sed in disco sparsius sat leviter haud aspere (ad latera sat grosse sat crebre) punctulato,

lateribus haud deplanatis, angulis posticis magis rotundatis; scutello punctulato; elytris sub callum humeralem leviter depresso, pone basin vix impressis, seriatim sat subtiliter (latera versus magis fortiter) punctulatis, verrucis parvis modice distinctis seriatim instructis, intersticiis sat planis (apicem versus magis rugulosis), parte marginali a disco vix (apicem versus subdistincto) distincto; calli humeralis margine interno a sutura quam ab elytrorum margine laterali haud multo magis distanti; segmento ventrali basali sparsim subtilius punctulato. Long.  $3\frac{3}{5}$ , lat.  $2\frac{3}{5}$  lines.

Also resembling *P. foveata* superficially, but at once distinguishable from it and its other near allies *inter alia* by the very much finer puncturation of its elytra, and by the inner edge of the humeral callus being very little nearer to the lateral margin than to the suture. Also resembles *P. seriata*, Germ., but differs from it *inter alia* by the presence of a depression below the humeral callus.

N.S. Wales; taken by Mr. Froggatt on the Blue Mountains.

#### P. TRANSVERSALIS, sp.nov.

Ovata; sat convexa, altitudine majori (a latere visa) contra elytrorum marginem medium (vel paullo magis antice) posita; nitida; subtus rufa vel rufo-picea; capite prothoraceque rufis hoc plus minusve piceo-adumbrato, elytris piceis rufo-variegatis et nigro-verrucatis, antennis pedibusque rufis (nonnullorum exemplorum magis obscuris); capite crebre subtilius punctulato; prothorace quam longiori ut  $2\frac{1}{2}$  ad 1 latiori, ab apice ad vel paullo ultra medium dilatato, pone apicem transversim manifeste impresso, sat crebre subirregulariter (ad latera grosse rugulose) punctulato, lateribus sat fortiter arcuatis nullo modo deplanatis, angulis posticis rotundatis; scutello fere laevi; elytris sat fortiter sub callum humeralem depresso (et pone basin late transversim fortiter impressis), fortiter sat crebre subseriatim (ad latera magis, postice minus, fortiter) punctulatis, verrucis nitidis sat magnis instructis

(his in parte impressa postbasali parentibus, et pone hanc partem ut ruga transversa fere a sutura ad marginem lateralem continua confluentibus), interstitiis vix rugulosis, parte marginali minus lata a disco (per sulcum ante medium late interruptum) divisa; calli humeralis margine interno a sutura quam ab elytrorum margine laterali sat multo magis distanti; segmento ventrali basali sparsim minus subtiliter punctulato.

Femina quam mas magis convexa. Long. 3-3½, lat. 2½-2¾ lines.

At once distinguishable from all its allies by the tendency of the elytral verrucæ to coalesce into coarse nitid ridges, the most conspicuous of which is placed at about the middle of the elytra and runs from near the suture almost to the lateral margin.

S. Australia; widely distributed.

#### TABULATION OF THE SPECIES FORMING SUBGROUP III.

- \*A. Elytra with a distinct postbasal impression on disc.
- B. Elytral margin (viewed from the side) straight or but little sinuous.
- C. Elytral puncturation (and especially its seriation) much obscured by irregular transverse rugulosity.
- D. Elytra not marked with a common dark blotch behind the scutellum.
- E. Elytral verrucæ of hind declivity all closely placed in rows... .... *granaria*, Chp.
- EE. Elytral verrucæ of hind declivity sparse and confused.
- F. Inner edge of humeral calli evidently nearer to lateral margin than to suture..... *rugulosior*, Blackb.
- FF. Inner edge of humeral calli equidistant between lateral margin and suture..... *morosa*, Blackb.
- DD. Elytra with a conspicuous common dark blotch behind scutellum..... *stigma*, Blackb.
- CC. Elytral interstices not, or but very feebly, rugulose, not obscuring the punctures.

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\* The impression is less marked in *granaria*, Chp., than in its allies

- D. Prothorax strongly rugulose, even more so than in *P. serpiginosa*..... Sloanei, Blackb.
- DD. Prothorax not, or but little, rugulose.
  - E. Depressed species, upper outline (viewed from side) more or less straight, humeral callus exceptionally near lateral margin.
    - F. Elytral margin (viewed from side) distinctly though not strongly sinuous; form wide..... grossa, Blackb.
    - FF. Elytral margin (viewed from side) straight; form notably less wide.... seriata, Germ.
  - \*EE. Species of more convex form; upper outline (viewed from side) a continuous curve.
    - F. Prothorax closely punctulate.
    - G. Prothorax with black markings.
    - H. Underside testaceous (here and there infuscate) ..... interioris, Blackb.
    - HH. Underside black..... tincticollis, Blackb.
    - GG. Prothorax without markings (size small, scarcely 3 lines)..... malevola, Blackb.
    - FF. Prothorax sparsely punctulate..... Leai, Blackb.
- BB. Elytral margin (viewed from the side) strongly sinuous.
  - C. Elytra furnished with strongly defined interrupted costæ..... costipennis, Chp.
  - CC. Elytra without costæ..... strigosa, Chp.
- †AA. No postbasal impression on disc of elytra.
  - B. Elytral verrucæ concolorous with or darker than general surface.
    - C. Punctuation of prothorax more or less close and at most moderately strong.
      - D. Seriate arrangement of elytral punctures and verrucæ well defined.
        - E. Head marked with black, elytral verrucæ concolorous with general surface..... maculiceps, Blackb.
        - EE. Head unicolorous, elytral verrucæ quite black..... pustulifera, Blackb.

\* *P. interioris* is somewhat intermediate between this and the more depressed form.

† In *P. inornata* there are some traces of an impression.

- DD. Seriate arrangement of elytral verrucæ  
and especially the punctures scarcely  
evident.
- E. Elytra exceptionally finely punctulate.  
F. Form exceptionally wide, elytra by  
measurement wider than long..... *alta*, Blackb.
- FF. Form notably less wide, elytra longer  
than wide..... *inornata*, Blackb.
- EE. Elytra much more coarsely punctulate *inæqualis*, Blackb.
- CC. Puncturation of prothorax very coarse.  
D. Inner edge of humeral calli much nearer  
to lateral margin of elytra than to suture *alpina*, Blackb.
- DD. Inner edge of humeral calli equidistant  
between lateral margin of elytra and  
suture..... *asperula*, Chp.
- CCC. Puncturation of prothorax very sparse and  
fine..... *borealis*, Blackb.
- BB. Elytral verrucæ conspicuously paler in colour  
than the general surface  
C. Form oval and depressed..... *notabilis*, Blackb.  
CC. Form subcircular and strongly convex..... *vomica*, Blackb.

P. RUGULOSIOR, sp.nov.

♂. Latissime subovalis, subcircularis; modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium (vel paullo magis antice) posita; sat nitida; ferruginea, corpore subtus pedibus elytrisque plus minusve fusco-adumbratis, horum verrucis piceis; capite crebre subaspere punctulato; prothorace quam longiori ut  $2\frac{2}{3}$  ad 1 latiori; ab apice longe ultra medium dilatato, pone apicem transversim leviter impresso, crebrius subfortiter subrugulose (ad latera grosse rugulose) punctulato, lateribus modice arcuatis haud deplanatis, angulis posticis nullis; scutello nitido vix punctulato; elytris sub callum humeralem haud depressis, pone basin transversim impressis, crebre minus fortiter subseriatim (ad latera multo magis grosse, postice magis subtiliter) punctulatis, verrucis modice magnis sat numerosis confuse instructis, intersticiis (parte subbasali impressa excepta) confertim granuloso-ruguloso (præsertim apicem versus), parte

marginali a disco vix distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paullo magis distanti; segmento ventrali basali punctulato. Long.  $2\frac{4}{5}$ , lat.  $2\frac{2}{5}$  lines.

An inconspicuous species chiefly notable for its wide form, almost entire absence of distinction between the discal and marginal parts of the elytra and fine close but not strongly elevated granulosity of the interstices of the elytral puncturation,—such that the rugulosity of the elytra (especially behind) is more conspicuous than the puncturation.

S. Australia; Adelaide district.

P. MOROSA, sp.nov.

*P. rugulosiori* affinis; valde convexa; colore magis obscura, nonnullorum exemplorum prothorace nigro-maculato; prothorace quam longiori ut  $2\frac{1}{2}$  ad 1 latiori, in disco magis subtiliter magis æqualiter nullo modo rugulose punctulato; elytris subtiliter punctulatis, magis crebre et subtiliter rugulosis, ad latera quam in disco vix magis grosse sculpturatis, calli humeralis margine interno a sutura quam ab elytrorum margine laterali haud magis distanti; cetera ut *P. rugulosior*. Long.  $3\frac{1}{2}$ , lat. 3 lines.

Femina quam mas etiam magis convexa.

This is a somewhat isolated species owing to its great convexity (the "greatest height," viewed from the side being distinctly greater than half the length of the elytral margin, at any rate in the female). Most of the species of similar convexity have the "greatest height" much nearer to the front. Its fine puncturation is also a notable character, and the great elevation of the vertical part of its epipleuræ, owing to which the inner edge of the humeral callus is unusually distant from the lateral margin.

Kangaroo Island.

P. STIGMA, sp.nov.

Ovata; sat fortiter convexa; altitudine majori (a latere visa) contra elytrorum marginem medium (vel paullo magis antice)

posita; sat nitida; ferruginea, prothoracis maculis nonnullis elytrorum maculis nonnullis (præsertim macula sat magna communi antemediana) et corporis subtus partibus nonnullis piceis; capite crebre subtilius punctulato; prothorace quam longiori ut  $2\frac{2}{3}$  ad 1 latiori, ab apice longe ultra medium dilatato, pone apicem transversim impresso, sat crebre minus fortiter (ad latera grosse rugulose) punctulato, lateribus sat fortiter arcuatis nullo modo deplanatis, angulis posticis nullis; scutello fere laevi; elytris sub callum humeralem haud depressis, pone basin transversim leviter impressis, sat crebre sat fortiter vix seriatim (ad latera multo magis grosse) punctulatis, verrucis minus numerosis minus ordinatim instructis, interstitiis sat fortiter (præsertim transversim) rugulosis, parte marginali sat lata a disco minus (prope apicem magis perspicue) distincto; segmento ventrali basali subfortiter punctulato. Long.  $2\frac{4}{5}$ , lat.  $2\frac{1}{5}$  lines.

Feminæ quam maris altitudine majori paullo magis postice posita.

The dark markings on the prothorax of the type consist of several small ill-defined blotches which in some examples coalesce into a large and better defined blotch on each side. In the type the common blotch on the elytra is accompanied by several small spots in the basal region, but in some examples it is the only dark mark except the verrucæ; I have not seen any example of the species in which the common elytral blotch is altogether wanting. In some examples the verrucæ are scarcely darker than the derm.

Victoria; N.S.W.; S. Australia.

#### P. SLOANEI, sp.nov.

♀. Ovata minus lata; minus convexa, altitudine majori pone elytrorum marginem medium posita; sat nitida; testacea, corpore subtus piceo-vario, prothorace elytrisque tortuose nigro-notatis, horum verrucis nigris; capite fortius subrugulose punctulato; prothorace quam longiori ut  $2\frac{1}{2}$  ad 1 latiori, ab apice ultra medium dilatato, pone apicem transversim impresso, fortiter (ad latera grosse) rugulose punctulato,

lateribus sat arcuatis nullo modo deplanatis, angulis posticis nullis; scutello punctulato; elytris sub callum humeralem haud depressis, pone basin parum perspicue impressis, sat crebre subgrosse subseriatim (postice minus grosse) punctulatis, verrucis numerosis sat æqualiter seriatim instructis, interstitiis vix (postice magis perspicue) rugulosis, parte marginali a disco vix distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsim subtiliter punctulato. Long. 4, lat.  $2\frac{4}{5}$  lines.

A conspicuous species, notable for the sharply defined contrast between the testaceous derm and the intricate sinuous black markings and verrucæ of its upper surface, also for the strong but somewhat fine rugulosity of the disc of its prothorax, the coarse punctuation of its elytra, &c.

N.S. Wales; sent to me by Mr. Sloane.

#### P. GROSSA, sp.nov.

♀. Ovata, sat depressa, modice nitida; ferruginea, corpore subitus pedibus prothorace elytrisque plus minusve piceo-adumbratis; capite subtilius sat crebre punctulato; prothorace quam longiori ut  $2\frac{1}{2}$  ad 1 latiori, ab apice ultra medium dilatato, pone apicem transversim impresso, dupliciter (sc. subtiliter et magis fortiter), ad latera grosse rugulose, minus crebre punctulato, lateribus modice arcuatis nullo modo deplanatis, angulis posticis rotundatis; scutello punctulato; elytris sub callum humeralem haud decessis, pone basin leviter impressis, sat crebre sat grosse subseriatim (postice paullo minus grosse) punctulatis, verrucis piceis irregularibus (his hic illic ut costæ conjunctis) instructis, interstitiis leviter rugulosis, parte marginali a disco vix distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsim subtiliter punctulato. Long.  $3\frac{3}{5}$ , lat.  $2\frac{4}{5}$  lines.

This species bears much general resemblance to *P. alticola* and its allies, but may be at once separated from them by the entire

absence of any depression below the humeral callus, as well as by its more depressed form, differently sculptured prothorax, &c.

N.S. Wales; Tweed River district.

P. INTERIORIS, sp.nov.

♀. Subovata; modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; rufo-ferruginea, prothoracis maculis nonnullis et elytrorum maculis nonnullis verrucisque nigro-piceis; capite crebre minus fortiter punctulato; prothorace quam longiori ut  $2\frac{4}{7}$  ad 1 latiori, ab apice fere ad basin dilatato, pone apicem transversim impresso, sat crebre subaspere (ad latera grosse rugulose) punctulato, lateribus minus arcuatis nullo modo deplanatis, angulis posticis rotundatis; scutellō fere ut prothorax punctulato sed minus crebre; elytris sub callum humeralem haud depresso, pone basin transversim impressis, crebre fortiter subseriatim (ad latera magis, postice minus, fortiter) punctulatis, verrucis sat numerosis (per totam superficiem, parte postbasali impressa excepta, distributis) seriatim instructis, interstitiis antice vix (postice manifeste) rugulosis, parte marginali a disco vix distincta, margine ipso angusto manifeste extrorsum inclinato, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali sparsim subtilius punctulato. Long.  $4\frac{1}{5}$ , lat.  $3\frac{1}{2}$  lines.

A species without any very strongly marked structural characters, a little less markedly convex, moreover, than the other species with which I have associated it. The presence of about four ill-defined blackish marks on the prothorax and the regular seriation of the elytral verrucæ together with the blackish stains on the elytra, especially about the middle of the suture, are superficial characters (probably not very variable) by which the species may be somewhat easily recognised among its near allies. It is not unlike *P. funerea*, Blackb., which, however, is very easily recognised by the great width of its prosternal ridge.

Central Australia.

## P. TINCTICOLLIS, sp.nov.

♂. Late subovata, modice convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; sat nitida; testacea, corpore subtus prothoracis maculis 4 transversim positis sat parvis elytrorum verrucis sat magnis parum elevatis sat numerosis nigris, antennis apicem versus paullo infuscatis; capite crebre subtilius punctulato; prothorace quam longiori ut fere 3 ad 1 latiori, ab apice ultra medium dilatato, antice minus angustato pone apicem transversim vix impresso, sat crebre minus fortiter (ad latera grosse rugulose) punctulato, lateribus sat fortiter arcuatis nullo modo deplanatis, angulis posticis rotundatis; scutello vix punctulato; elytris sub callum humeralem haud depressis, pone basin transversim impressis, sat crebre fortiter subseriatim (ad latera multo magis grosse) punctulatis, verrucis sat numerosis seriatim instructis, intersticiis (nisi ad latera) vix rugulosis, parte marginali a disco minus distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paullo magis distanti; segmento ventrali basali sparsim minus fortiter punctulato. Long.  $3\frac{1}{2}$ , lat.  $2\frac{3}{5}$  lines.

Resembles *P. granaria*, Chp., in colour and markings of upper surface, but differs by its black underside (the legs nevertheless testaceous), considerably wider prothorax much less narrowed in front, discal interstices of elytra scarcely at all rugulose even close to the apex, &c.

W. Australia; taken by E. Meyrick, Esq.

## P. MALEVOLA, sp.nov.

♀. Subovata; minus lata; sat convexa; *P. stigmati* affinis; elytris macula communi suturali haud ornatis; prothorace quam longiori ut  $2\frac{2}{5}$  ad 1 latiori, magis crebre magis rugulose punctulato; scutello rugulose ut prothorax punctulato; elytris propter interstitia minus (præsertim transversim) rugulosa magis perspicue seriatim punctulatis; cetera ut *P. stigmati*. Long. 3, lat.  $2\frac{3}{10}$  lines (vix).

A species quite capable of being confused with several others, especially *P. rugulosior* and *P. stigma*. From both these it may be at once distinguished by the evidently more conspicuous and regularly seriate puncturation of its elytra, from the former also by its much narrower form and strongly rugulose scutellum, and from the latter also by its rugulose scutellum and the entire absence of any blackish patch on the sutural region.

S. Australia, near Adelaide.

*P. LEAI*, sp.nov.

♂. Ovata; modice lata; sat convexa, altitudine majori (a latere visa) contra vel fere ante elytrorum marginem medium posita; sat nitida; subtus piceo-rufoque-variegata; supra testaceo-brunnea, prothoracis maculis 4 parvis (his transversim in disco dispositis) et elytrorum verrucis obscuris, antennis rufis apicem versus piceis, pedibus piceis plus minusve rufo-variegatis; capite crebrius minus subtiliter punctulato; prothorace quam longiori ut  $2\frac{2}{3}$  ad 1 latiori, ab apice sat longe ultra medium dilatato, pone apicem transversim leviter impresso, subtilius sat sparsim (ad latera grossius nec confluenter) punctulato, lateribus sat arcuatis nullo modo deplanatis, angulis posticis rotundatis; scutello sparsissime punctulato; elytris sub callum humeralem haud depresso, pone basin transversim impressis, fortius minus crebre subseriatim (ad latera vix magis, postice vix minus, fortiter) punctulatis, verrucis parvis sat numerosis sat regulariter seriatim instructis, interstitiis haud rugulosis, parte marginali sat lata a disco vix perspicue (apicem versus magis distinete) divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali sat multo magis distanti; segmento ventrali basali sparsim subtiliter punctulato. Long.  $3\frac{1}{2}$ , lat.  $2\frac{1}{2}$  lines.

This species is rather closely allied to *P. interioris*, which it greatly resembles in markings and colour except in the underside being much darker and the patches of dark colour on the elytra

being absent. It is, however, very much smaller, with the prothorax very much less closely and more finely punctured.

N. S. Wales; sent to me by Mr. Lea.

P. STRIGOSA, Chp.

I have an example named as this species from Dr. Chapuis' collection, and there is also before me an example belonging to Mr. Lea which I cannot distinguish from it. Chapuis' locality is "Parao River," Mr. Lea's "Swan River." It is, of course, possible that the species is found in these two very distant localities, but I think it more probable either that Dr. Chapuis' locality is wrong, or my example is not really conspecific with the type but represents a closely allied species.

P. MACULICEPS, sp.nov.

♀. Subovata, modice lata; sat convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; minus nitida; obscure ferruginea; capite antice, antennis apicem versus, nonnullorum exemplorum vittis elytrorum et (in his) verrucis, pedibus plus minusve, et nonnullorum exemplorum sternis, piceis; capite sat crebre subrugulose punctulato; prothorace quam longiori ut  $2\frac{2}{3}$  ad 1 latiori, ab apice longe ultra medium dilatato, pone apicem transversim impresso, sat crebre subfortiter sat rugulose (ad latera grosse) punctulato, lateribus sat fortiter arcuatis nullo modo deplanatis, angulis posticis rotundatis; scutello leviter punctulato; elytris sub callum humeralem haud depresso, pone basin transversim haud impressis, subfortiter subseriatim (ad latera paullo magis, postice paullo minus, fortiter) punctulatis, verrucis parvis sat crebre seriatim instructis, interstitiis modice rugulosis, parte marginali a disco vix manifeste divisa, calli humeralis margine interno a sutura quam ab elytrorum margine lateralii paullo magis distanti; segmento ventrali basali sparsius subfortiter punctulato. Long. 4, lat. 3 lines.

Among its allies structurally (having no subbasal elytral impression) this species is superficially distinct by its subseriate elytral puncturation together with the almost regular rows of small rather closely placed verrucæ, which are concolorous with the derm. There is, however, a tendency to the elytra being marked with dark vittæ (which in some examples are very well-defined), and on these vittæ the verrucæ are concolorous with them and not with the general surface.

S. Australia, Yorke's Peninsula.

P. PUSTULIFERA, sp.nov.

*P. alticola* affinis; differt colore toto (prothoracis maculis non-nullis, et elytrorum verrucis, nigris exceptis) testaceo-castaneo; prothorace in disco magis fortiter minus crebre (ad latera grosse confluenter) punctulato; scutello nitido sparsim fortiter punctulato; elytris in disco magis fortiter punctulatis, verrucis valde perspicuis (haud transversim elongatis) in seriebus integris circiter 9 sat crebre sat regulariter dispositis; cetera ut *P. alticola*.

Femina quam mas paullo magis convexa. Long. 4, lat.  $2\frac{4}{5}$  lines.

Although superficially very different from *P. alticola*, this species is structurally very close to it. The notably coarser puncturation of its upper surface, however, forms a reliable distinction, and the colour and markings are so different that it is unlikely any varieties approximate much to *alticola*. With the exception of some black marks on the prothorax (a longitudinal blotch on either side of the middle and a few small spots nearer the margins, in the type) and numerous small round black verrucæ (about 15 in a series) placed in about 9 series very evenly over the whole elytra, the entire insect is of a uniform pale chestnut colour. There is, in the type, also a common dark blotch on and around the suture a little in front of its middle, apparently caused by the intervals between two or three verrucæ being stained with dark colouring similar to that of the verrucæ.

N. W. Australia; sent to me by Mr. Froggatt.

## P. ALTA, sp.nov.

♀. Ovata, latissima; valde convexa, altitudine majori (a latere visa) pone elytrorum marginem medium posita; modice nitida; castaneo-brunnea, antennis apicem versus pedibus in parte et corpore subtus piceis; capite sat crebre rugulosopunctulato; prothorace quam longiori ut  $2\frac{3}{4}$  ad 1 latiori, ab apice sat longe ultra medium dilatato, pone apicem transversim leviter impresso, crebre subfortiter aspere sat æqualiter (parte laterali sat grosse rugulosa excepta) punctulato, lateribus sat fortiter arcuatis nullo modo deplanatis, angulis posticis nullis; scutello ut prothorax punctulato; elytris subcallum humeralem haud depresso, pone basin transversim haud impressis, confertim dupliciter (subtilius et magis subtiliter) sat aspere vix subseriatim (latera versus paullo magis, postice vix minus, fortiter) punctulatis, verrucis parvis nonnullis parum perspicuis instructis, interstitiis minus rugulosis, parte marginali a disco vix distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paullo magis distanti; segmento ventrali basali subfortiter vix crebre punctulato; antennarum articulo 3<sup>o</sup> quam 4<sup>us</sup> distinete longiori. Long. 3½, lat. 3 lines.

A somewhat isolated species on account of its resembling by its great convexity the species of the next subgroup, but differing from them by the greatest height of the elytra being very far back. On careful examination it is seen that the 3rd joint of the antennæ is distinctly longer than the 4th, but the difference in length is not marked enough to associate the species with *P. regularis* and its allies, and its natural place is certainly near *P. inornata*, Blackb.

S. Australia; Adelaide; also Murray Bridge.

## P. INORNATA, sp.nov.

♂. *P. altæ* affinis; minus lata, multo minus convexa; picea, antennis basin versus rufis; prothorace ab apice paullo minus longe ultra medium dilatato; scutello lævi; elytris pone basin

transversim vix penitus æquali; antennarum articulo 3<sup>o</sup> quam 4<sup>us</sup> haud longiori; cetera ut *P. alta*. Long. 4, lat. 3½ lines.

♀. Quam mas subconvexiori.

Except in respect of a few well-marked characters this species is so close to *P. alta* that it seems unnecessary to repeat the whole of the description of the latter which (modified by the characters noted above) applies exactly to this insect. The much less convexity and the antennal difference at once separate *P. inornata*, as also the absence of puncturation on the scutellum, but this latter character I do not so absolutely rely upon, as I find that there is a slight tendency to variation in the puncturation of the scutellum of many species of *Paropsis*. I do not think, however, that any specimen of *P. inornata* would have anything like the strong scutellar puncturation of *P. alta*, which is quite continuous with the puncturation of the prothorax. Indeed, I have before me some examples of *Paropsis* from Yorke's Peninsula and from Eucla which I believe to be *P. inornata*, in which the scutellum bears some fine punctures. It is possible that they represent a distinct very close species, but the point could not be certainly decided without the examination of more examples from the same locality as the type of *P. inornata*, from which locality I have seen only one female, and that one is in bad condition.

W. Australia; Eyre's Sand Patch.

*P. INÆQUALIS*, sp.nov.

♂. Late ovata; minus convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; modice nitida; nigra, antennarum basi et pedibus maculatim (tarsis totis) rufis; capite prothoraceque æqualiter (sed hoc ad latera grosse rugulose) crebre subfortiter fere rugulose punctulatis; hoc quam longiori ut 2½ ad 1 latiori, ab apice ultra medium dilatato, pone apicem transversim leviter impresso, lateribus fortiter arcuatis nullo modo deplanatis, angulis posticis nullis; scutello (exempli typici carente); elytris sub callum humerali haud depresso, pone basin transversim haud impressis,

sat grosse vix crebre vix subseriatim (ad latera magis, postice minus, grosse) punctulatis, verrucis sat magnis sat numerosis minus elevatis sat seriatim instructis, interstitiis parum rugulosis, parte marginali a disco vix (in parte subapicali paullo magis distincte) divisa; segmento ventrali basali subfortiter subcerebre punctulato. Long.  $3\frac{1}{2}$ , lat.  $2\frac{4}{5}$  lines.

A fairly distinct species notable for its black colour and the coarse puncturation of its elytra, the verrucæ of which are somewhat large and numerous but not strongly elevated. The front margin of the prosternum is exceptionally wide.

S. Australia; Adelaide district.

P. ALPINA, sp.nov.

♀. Ovata, sat fortiter convexa, altitudine majori (a latere visa) ad elytrorum marginem medium posita; sat nitida; sordide flavo-brunnea, elytris (parte basali mediana et parte laterali antica exceptis) nigro-adumbratis et confuse nigro-maculatis, antennis apicem versus vix infuscatis; capite inæquali fortius sat rugulose punctulato; prothorace quam longiori plus quam duplo (ut  $2\frac{1}{2}$  ad 1) latiori, ab apice longe ultra medium dilatato, pone apicem haud transversim impresso, subgrosse rugulose (ad latera etiam magis grosse) punctulato, lateribus sat arcuatis haud deplanatis, angulis posticis nullis; scutello lœvi; elytris dupliciter (grosse et minus grosse) sat crebre subseriatim punctulatis, antice haud (postice vix distincte) verrucosis, interstitiis antice vix (ad latera vermiculatim grosse, postice crebre sat granulatim) rugulosis, sub callum humeralem leviter depressis, parte marginali a disco vix distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paullo magis distanti; segmento ventrali basali sparsius minus subtiliter punctulato; antennarum articulo  $3^{\circ}$  quam  $4^{\text{ns}}$  sat longiori. Long. 4, lat.  $2\frac{4}{5}$  lines.

At its widest somewhat behind the middle of the elytra; notable by the 3rd joint of the antennæ markedly longer than the 4th, also (so far as the unique type is concerned) by the peculiar colouring of its elytra, which are of a yellow-brown colour with

an ill-defined festoon-like patch of blackish colour a little behind the base (its extremities on the humeral calli), behind which the whole surface (except the front half of the marginal portion) is thickly set with blackish irrorations very various in size. Genuine verrucæ are almost non-existent except near the apex, and even there they are so much mixed with confused rugulosity as to need being looked for.

Victoria; on the higher Alps.

P. BOREALIS, sp.nov.

Subovata; sat fortiter convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; nitida; rufa, prothoracis marginibus scutello elytrorum macula communi antemediana et utrinque macula prope humerum posita corporeque subtus (hoc maculatim) indeterminate piceis; capite sparsim subfortiter punctulato; prothorace quam longiori ut  $2\frac{1}{4}$  ad 1 latiori, ab apice vix ultra medium dilatato, pone apicem transversim haud impresso, sparsim inæqualiter subacervatim (ad latera sat grosse sat crebre nec confluenter) punctulato, lateribus minus fortiter arcuatis haud deplanatis, angulis posticis rotundatis; scutello punctulato; elytris sub callum humeralem haud depresso, pone basin nullo modo impressis, minus fortiter sat crebre sat æqualiter (antice suturam versus magis subtiliter) subseriatim punctulatis, verrucis nonnullis parvis subseriatim dispositis instructis, interstitiis vix rugulosis, parte marginali a disco haud distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paullo magis distanti; segmento ventrali basali sparsim obsolete punctulato. Long. 4, lat.  $2\frac{4}{5}$  lines.

As the type has lost its tarsi, I am not sure of its sex, but have little doubt of its being a female. The entire absence of any trace of a subbasal elytral impression and the evenness of the elytral puncturation are well-marked characters. The inconspicuous verrucæ are concolorous with the derm and run in fairly

regular rows. The markings resemble those of *P. asperula*, Chp., to which this species is certainly allied, though differing in many characters (*inter alia*, the much finer prothoracic and elytral punctures, with non-rugulose interstices, and the absence of distinction between the discal and marginal parts of the elytra).

N. Territory of S. Australia; taken by the late Dr. Bovill.

**P. NOTABILIS, sp.nov.**

♂. Ovalis; minus convexa, altitudine majori (a latere visa) contra elytrorum marginem medium posita; nitida; testaceo-brunnea, maculis in capite prothoraceque nonnullis elytris (verrucis exceptis) antennis apicem versus et corpore subtus (hoc maculatim) obscurioribus; capite sparsius subtilius punctulato; prothorace quam longiori fere ut  $2\frac{1}{3}$  ad 1 latiori, latitudine majori fere ad basin posita, antice minus fortiter angustato, pone apicem haud impresso, fortiter acervatim haud crebre (ad latera sat grosse nec crebre) punctulato, lateribus leviter arcuatis haud deplanatis, angulis posticis obtusis; scutello lœvi; elytris sub callum humeralem haud depresso, pone basin nullo modo impressis, fortiter sparsius (ad latera parum magis fortiter) punctulatis, verrucis numerosis magnis parum elevatis instructis, intersticiis haud rugulosis, parte marginali angusta a disco (per sulcum sat distinctum) pone medium divisa, calli humeralis margine interno a sutura quam ab elytrorum margine laterali multo magis distanti; segmento ventrali basali vix manifeste punctulato. Long. 6, lat.  $4\frac{1}{5}$  lines.

A remarkable species, with considerable superficial resemblance to *P. solitaria*, Blackb., but differing from it *inter alia* by its much larger size and elytra not depressed below the humeral callus. Its large, scarcely elevated, numerous elytral verrucæ of pallid colour furnish a notable character. Its prothorax is suggestive of species of the *variolosa* group, but is neither mucronate at the front angles nor laterally sinuate.

N. S. Wales; in the collection of Mr. G. Masters.

## P. VOMICA, sp.nov.

♂. Latissime ovata; fortiter convexa, altitudine majori (a latere visa) anterius quam contra elytrorum marginem medium posita; sat nitida; rufo-brunnea, elytrorum verrucis testaceis vel flavescentibus, corpore subitus in majori parte picescenti; capite sat crebre aspere punctulato; prothorace quam longiori ut  $2\frac{2}{5}$  ad 1 latiori, ab apice paullo ultra medium dilatato, pone apicem transversim vix impresso, sat crebre dupliciter (subtiliter et sat fortiter, ad latera grosse) punctulato, lateribus sat arcuatis late distinete deplanatis, angulis posticis rotundatis; scutello fere lœvi; elytris sub callum humeralem haud depressis, pone basin haud impressis, subtilius vix seriatim (ad latera vix magis grosse) punctulatis, verrucis magnis (minus fortiter elevatis) numerosis seriatim instructis, interstitiis paullo rugulosis, parte marginali a disco (nisi apicem versus) minus distincta, calli humeralis margine interno a sutura quam ab elytrorum margine laterali paullo magis distanti; segmento ventrali basali sublœvi; antennarum articulo 3<sup>o</sup> quam 4<sup>us</sup> sat longiori.

♀. Quam mas paullo minus lata, segmento ventrali apicali magis perspicue punctulato. Long. 4-4 $\frac{1}{5}$ , lat. 3 $\frac{1}{2}$  lines.

An extremely distinct species, on account of the large moderately elevated verrucae of the elytra conspicuously more pallid than the general surface and very evenly distributed except on a small roundish common antemedian space. Its strongly convex form suggests alliance with the species of the next subgroup, but the greatest height of its elytra is very little in front of the middle. It seems to be somewhat uncertain in position in the genus, the slightness of the tendency to seriate arrangement in the punctures of its elytra being suggestive of species with the front angles of the prothorax mucronate.

N. W. Australia; sent to me by Mr. Masters.



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Blackburn, Thomas. 1897. "Revision of the genus Paropsis. Part I." *Proceedings of the Linnean Society of New South Wales* 21, 637–693.

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