

APPENDIX 1. Measurements of the specimens of *Anthracaris gracilis* from Piesberg and of *A.*

gracilis taken from Brooks (1962). **(A)** Raw values, in millimetres, **(B)** normalised values.

Abbreviations: NA = not available.

A.

Reference	Specimen	1 Rostrum length	2 Length of shield	3 Anterior width	4 Medial width	5 Posterior width	6 Antero-lateral spine
Brooks 1962, pl. 32, fig. 2	PY 19975	4	12	6	12	8	1
Piesberg	1.587A	7	10	8	10	6	1
Piesberg	Pal590-2	NA	9	6	8	4	1
Piesberg	1.228A	4	8	6	8	5	2
Brooks 1962, text-pl. 3, fig. d	ISMNH 3067	NA	12	8	11	9	1
Brooks 1962, text-pl. 3, fig. d	UI X-343	NA	16	12	14	12	1
Brooks 1962, text-pl. 3, fig. d	USNM 38843	NA	12	7	10	8	1
Brooks 1962, text-pl. 3, fig. d	PY 19932	NA	11	6	9	7	1
Brooks 1962, text-pl. 3, fig. d	PY 19933	NA	15	9	12	9	1.5
Brooks 1962, text-pl. 3, fig. d	PY 19936	NA	18	10	16	10	2
Brooks 1962, text-pl. 3, fig. d	PY 19993	8	14	9	12	9	NA
Brooks 1962, text-pl. 3, fig. d	PY 19996	8	13	10	13	10	NA

B.

Reference	Specimen	1 Rostrum length	2 Length of shield	3 Anterior width	4 Medial width	5 Posterior width	6 Antero-lateral spine
Brooks 1962, pl. 32, fig. 2	PY 19975	0.19983	0.66639	0.35450	0.64083	0.44500	0.06706
Piesberg	1.587A	0.40678	0.56550	0.45089	0.54156	0.33989	0.08256
Piesberg	Pal590-2	NA	0.51061	0.35894	0.41922	0.24922	0.05767
Piesberg	1.228A	0.21389	0.42306	0.34372	0.42972	0.25433	0.08594
Brooks 1962, text-pl. 3, fig. d	ISMNH 3067	NA	0.66666667	0.44444	0.61111	0.50000	0.05556
Brooks 1962, text-pl. 3, fig. d	UI X-343	NA	0.88888889	0.66667	0.77778	0.66667	0.05556
Brooks 1962, text-pl. 3, fig. d	USNM 38843	NA	0.66666667	0.38889	0.55556	0.44444	0.05556
Brooks 1962, text-pl. 3, fig. d	PY 19932	NA	0.61111111	0.33333	0.50000	0.38889	0.07222
Brooks 1962, text-pl. 3, fig. d	PY 19933	NA	0.83333333	0.50000	0.66667	0.50000	0.08333
Brooks 1962, text-pl. 3, fig. d	PY 19936	NA	1	0.55556	0.88889	0.55556	0.11111
Brooks 1962, text-pl. 3, fig. d	PY 19993	0.44444	0.77778	0.50000	0.66667	0.50000	NA
Brooks 1962, text-pl. 3, fig. d	PY 19996	0.44444	0.72222	0.55556	0.72222	0.55556	NA

(C, D) Additional measurements and (E) graphical comparison of the specimens of *Anthracaris gracilis* from Piesberg and of *A. gracilis* taken from Brooks (1962, pl. 32, fig. 2). (C) Raw values, in millimetres, (D) normalised values. Abbreviations: NA = not available.

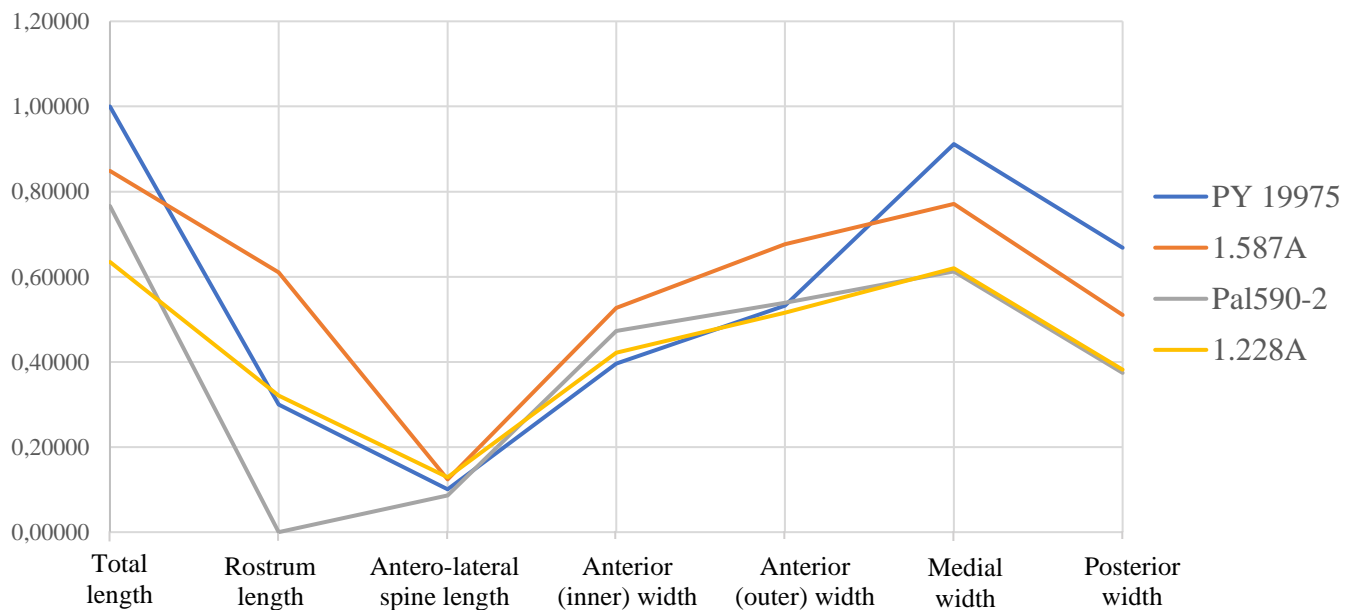
C.

Measurements	PY 19975	1.587A	Pal590-2	1.228A
Total length	11.995	10.179	9.191	7.615
Rostrum length	3.597	7.322	NA	3.850
Antero-lateral spine length	1.207	1.486	1.038	1.547
Anterior (Inner) width	4.745	6.322	5.672	5.052
Anterior (Outer) width	6.381	8.116	6.461	6.187
Medial width (widest portion)	10.935	9.248	7.346	7.435
Posterior width	8.010	6.118	4.486	4.578

D.

Measurements	PY 19975	1.587A	Pal590-2	1.228A
Total length	1.00000	0.84860	0.76624	0.63485
Rostrum length	0.29987	0.61042	NA	0.32097
Antero-lateral spine length	0.10063	0.12388	0.08654	0.12897
Anterior (Inner) width	0.39558	0.52705	0.47286	0.42118
Anterior (Outer) width	0.53197	0.67662	0.53864	0.51580
Medial width (widest portion)	0.91163	0.77099	0.61242	0.61984
Posterior width	0.66778	0.51005	0.37399	0.38166

E.



(F) Additional measurements, in millimetres, of a specimen of *Anthracaris gracilis* from Piesberg.

Measurements	1.529A
Total length (head+thorax)	8.808
Total width (base of second leg)	6.939
Length of sternites	5.226
Length of head	3.403
Length of pleon segment 1	1.624
Width of pleon segment 1	6.466
Length of pleon segment 2	6.602
Width of pleon segment 2	1.053
Coxa	0.455
Basipod	1.563
Ischium	2.759
Merus	1.780
Carpus	1.450
Propodus	1.644
Dactylus	1.029
Exopod proximal	1.557
Exopod distal	2.689