SUPPLEMENTARY DATA

Table captions of supplementary data

Table DR1. List of enrolled Cambrian trilobites, belonging to a variety of clades.

Table DR2. List of localities with articulated specimens throughout the Paleozoic showing the percentages of enrolled and prone trilobites at each locality. Percentages are plotted in Fig 2C except for those localities without information.

Table DR3. Parametric and non-parametric tests. A: Kruskal-Wallis test and Mann Whitney pairwise comparisons (non parametric-test alternative to ANOVA) of percentage of enrolled in Cambrian and post-Cambrian assemblages with articulated specimens from 66 localities. B: Kruskal-Wallis test and Mann Whitney pairwise comparisons of percentage of enrolled in Cambrian and post-Cambrian assemblages with articulated specimens without the Purujosa assemblage. C: ANOVA test and the Tukey's pairwise comparisons of percentage of total number of coaptative devices known in 109 trilobite genera according to geological period.

Table DR4. Analysis of coaptative devices, thoracic articulation and enrollment types in 112 genera of trilobites (own data and from the published literature: Adrain and Chatterton 1993, Adrain and Edgecombe, 1995, 1997; Brezinski, 1992; Bruton, 1967; 1983, 1999; Bruton and Haas, 1999; Chatterton and Campell, 1993; Chatterton and Lunvigssen, 2004; Chatterton et al., 1994, 2006; Clarckson, 1969; Clarkson and Henry, 1971; Clarkson et al., 1977; Esteve, 2009; Esteve et al., 2010; Ghobadi-Pour and Popov, 2009; Ghobadi Pour et al., 2007; Gibb and Chatterton, 2007; Hahn et al., 1983, 1990, 1996; Hanse, 2009; Hamman, 1985; Holloway and Carvalho, 2009; Lerosey-Aubril and Angiolinni, 2009; Levi-Setti, 1975, 1993; McKellar and Chatterton, 2009; McNamara et al., 2009; Orlowski, 1985; Owen, 1990; Owens, 1993; Palmer, 1958; Peng, 1992; Peng et al., 2004; Rábano et al., 1992; Ramsköld and Edgecombe, 1994; Speyer 1988; Stitt, 1976, 1983; Thomas, 1998; Webster, 2007; Whittington, 1950, 1952, 1971, 1992, 1993, 1996, 2000, 2003). List of coaptative devices and thoracic articulation: **Cephalon**: 1: Furrow under the doublure (Bergtröm, 1973; Stitt, 1983); 2: Vincular furrow on the doublure (subcranidial furrow *sensu* Delo, 1935; Hupé, 1953; Harrington et al., 1959); 3: Furrow on the anterior margin of hypostome or between the rostral plate and hypostome (Bergtröm, 1973; Hammann, 1985); 4: Vincular notches (Harrington et al., 1959; Speyer, 1988); 5: Granulose structure in the border and/or on doublure. (Clarkson and Henry, 1973); 6: Terraces lines on dorsal surface structure and/or on doublure (Stitt, 1976; Fortey, 1986; Whittingtton, 2003); 7: Anterior arch below frontal area (Stitt, 1983). **Pygidium**: 8: Ventral vincular furrow (Hammann, 1985); 9: Dorsal vincular furrow (Hammann, 1985); 10: Submarginal flange (Speyer, 1988); 11: Vincular hook on the posterior part (Harrington et al., 1959); 12: Vincular notches (Clarkson and Henry, 1973); 13: Knobs or granulose on dorsal surface structure and/or on doublure (Clarkson and Henry, 1973); 14: Terraces lines on dorsal surface structure and/or on

doublure (Clarkson and Henry, 1973); 15: Sagittal arching of the pigidial axis (Goldring, 1957; Lerosey-Aubril and Angioloni, 2009). **Thoracic articulations**: 16: Pre-annulus (Esteve et al., in press); 17: Half ring articulation (Harrington et al., 1959; Bergtröm, 1973); 18: Axial process (=Ball and socket connection) (Harrington et al., 1959; marginal connection devices *sensu* Bergtröm, 1973); 19: Develop of flexure of the pleura at a fulcrum (Whittington, 1990); 20: Narrow flange (Sort and long) (Whittington, 1990); 21: Marginal strip (Whittington, 1993); 22: Beveled facet on the steeper sloping (Whittington, 1990).

TABLE DR1

ORDER	FAMILY/FAMILIES	Genus/Genera	Reference
REDLICHIIDA, PTYCHORARIIDA.	PARADOXIDIDAE, CONOCORIPHIDAE, SOLENOPLEURIDAE	*Hydrocephalus* *Conocoryphe*, *Sao*.	Barrande, 1852
PTYCHORARIIDA.	SOLENOPLEURIDAE	*Solenopleuropsis*.	Prado et al., 1860
REDLICHIIDA.	PARADOXIDIDAE	*Paradoxides*.	Pompeckj, 1896
PTYCHORARIIDA.	SOLENOPLEURIDAE	*Solenopleura*.	Westergärd, 1936
PTYCHORARIIDA.	AGRAULIDAE	*Crassifimbra*.	Palmer, 1958
PTYCHORARIIDA, AGNOSTIDA.	BOLASPIDAE, PERONOSPIDAE	*Bolaspidella*, *Peronopsis*.	Robison, 1964
REDLICHIIDA.	ELLIPSOCEPHALIDAE	*Ellipsocephalus*.	Orlowski, 1975
PTYCHORARIIDA.	KINGSTONIIDAE, Uncertain	*Bynumina*, *Cliffia*, *Dabria*, *Elyaspis*.	Stitt, 1983
AGNOSTIDA.	AGNOSTOIDEA	*Agnostus*.	Müller and Walossek, 1985
REDLICHIIDA.	PARADOXIDIDAE	*Eccapardoxides*?	Becq-Giraudon and Baillat, 2005
PTYCHORARIIDA.	SOLENOPLEURIDAE	*Parasolenopleura*.	Fletcher, 2005
ASAPHIDA.	PLETHOPELTIDAE	*Plethopeltis*, *Leiocoryohe*.	Whittington, 2003
ASAPHIDA.	PLETHOPELTIDAE	*Stinopilus*.	Whittington, 2005
PTYCHORARIIDA.	CALODISCIDAE	*Calodiscus*.	Cederström et al., 2009
REDLICHIIDA, PTYCHORARIIDA, AGNOSTIDA.	PARADOXIDIDAE SOLENOPLEURIDAE CONOCORIPHIDAE ALOKISTOCARIDAE, PERONOPSIDAE	*Eccapadoxides*, *Solenopleuropsis*, *Conocoryphe*, New genus new species, *Peronopsis*.	This study

Table DR2. List of localities with articulated specimens throughout the Paleozoic showing the percentages of enrolled and prone trilobites at each locality. Except for localities with poor information, percentages are plotted in Fig 2C.

	N prone	% prone	N enroll	% enroll	N TOTAL	No genera	Age	Locality	Reference
1	39	100	0	0	39	1	Lower Cambrian	South Australia	Paterson *et al.*, 2007
2			1		50	1	Lower Cambrian	Nevada (USA)	Palmer, 1958
3		100		0	513	1	Lower Cambrian	Pioche Formation. Nevada (USA)	Webster *et al.,* 2008
4			27	0.68	3959	1	Lower Cambrian	(Fånån) Sweden	Cederström *et al.,* 2009
5	1	50	1	50	2	1	Lowe Cambrian	Polonia	Orlowski, 1975
6	331	58.6	234	41.4	565	5	Middle Cambrian	Purujosa (Spain)	This study
7	81	91	8	9	89	1	Middle Cambrian	Burges Shale (Canada) (245)	Michael Balint (pers. com.)
8	95	99	1	1	96	1	Middle Cambrian	Burges Shale (Canada) (420)	Michael Balint (pers. com.)
9				5		2	Middle Cambrian	House Range (Utah. USA)	Gaines & Droser, 2003 (Bob Gaines pers. com.)
10	4	80	1	20	5	1	Middle Cambrian	Newfoundland (Canada)	Fletcher, 2005
11	26	100	0	0	26	2	Middle Cambrian	Morocco	Geyer, 1993
12			Common			2	Middle Cambrian	Morocco	Geyer & Landing, 2006
13			Very common		133	1	Middle Cambrian	Sweden	Müller & Walassek, 1987
15			2	6.25	32	1	Late Middle Cambrian	Utah (USA)	Robison, 1964
16			83		83	3	Upper Cambrian	SE Missouri (USA)	Stitt, 1983
17	14	100	0	0	14	1	Early Ordovician	North Wales	Fortey & Owens, 1989
18	28	93.33	2	6.67	30	2	Ealy Ordovician	Lashkavak Formation (Iran)	Por *et al.,* 2007
19	9	90	1	10	10	1	Middle Ordovician	Bretagne (France)	Henry, 1970
20	42	97.67	1	2.33	43	1	Middle Ordovician	Valongo (N. Portugal)	Romano, 1991
21		90		10		1	Middle Ordovician	Oklahoma (USA)	Karin & Westrop, 2002
22	78	98.73	1	1.27	79	1	Middle Ordovician	Oklahoma (USA)	Karin & Westrop, 2002
23	7	87.5	1	12.5	8	1	Middle Ordovician	UK	Whittington, 1950
24	>1000		1	0.5	>1000	1	Middle Ordovician	Arouca (Portugal)	Gutiérrez-Marco *et al.,* 2009
25	11	78.6	3	21.4	14	1	Middle Ordovician	Arouca (Portugal)	Gutiérrez-Marco (pers. com.)
26		100		0		9	Middle Ordovician	SW Walles	Kennedy, 1989
27			Common			2	Middle Ordovician	Elnes Formation A (Oslo)	Hanse, 2009
28			Common			2	Middle Ordovician	B	Hanse, 2009
29			Common			2	Middle Ordovician	C	Hanse, 2009
30			Common			1	Middle Ordovician	D	Hanse, 2009
31			Common			2	Middle Ordovician	E	Hanse, 2009
32	22	88	3	12	25	1	Middle Ordovician	Oslo (Norway)	Henningsmoen 1960
33	Common	90	Unusual	30		2	Middle Ordovician	Trenton Group (New York. USA) Layer 3	Brett *et al.,* 1999
34	57	100	0	0	57	1	Middle Ordovician	Layer 4	Brett *et al.,* 1999
35	3	17.6	14	82.4	17	1	Middle Ordovician	Iran	Porur & Popov, 2009
36		97		3	37	1	Upper Ordovician	USA	Hughes & Cooper, 1999
37		44		56	52	1	Upper Ordovician	USA	Hunda *et al.,* 2006
38		60		40		1	Upper Ordovician	USA	Schumacher & Shake, 1997
39		65.6		34.6	788	1	Upper Ordovician	USA	Ferree, 1994
40	27	100	0	0	127	2	Upper Ordovician	Västergötlamd (Sweden)	Kielan-Jaworowska *et al.,* 1991
41		52.17	11	47.83	23	1	Early Silurian	Scotland (UK)	Clackson & Howells, 1981
42	common		Common	50		3	Early Silurian	Antocosti Island (Canda)	Chatterton & Ludvigsen, 2004
43	common		Rarely found			3	Early Silurian	Antocosti Island (Canda)	Chatterton & Ludvigsen, 2004
44					41	4	Early Silurian	Anticosti (Canada) Encrinnurus biofacies	Chatterton & Ludvigsen, 2004
45					67	3	Early Silurian	Proetus Biofacies	Chatterton & Ludvigsen, 2004
46					139	5	Early Silurian	Acernaspis biofacies	Chatterton & Ludvigsen, 2004
47	0	0	1	100	1	1	Silurian	Oklahoma (USA)	Adrain, 1996
48	2	100	0	0	2	1	Silurian	NE Canda	Adrain & Chatterton, 1994
49			> 25	25	100	1	Silurian	Gotland (Sweden)	Ramsköld, 1984
50			Very common	50		1	Silurian	Gotland (Sweden)	Bruton, 1967
51	17	76.47	4	23.53	ca. 150	1	Silurian	Scotland (UK)	Clarckson *et al.,* 1977
52	12	100	0	0	12	1	Silurian	Artic Canada	Adrain & Chatterton, 1993
53	8	53.33	7	46.67	15	1	Silurian	Gotland (Sweden)	Whittington, 1971
54						1	Silurian	Gotland (Sweden)	Stripp, 1962
55	>1000			11	>1000	1	Silurian	Bohemia	Paul S. Hong (pers. com.)
56			Very common	50		1	Silurian	Malvern (UK)	Thomas, 1998
57	19	95	1	5	20	1	Silurian	Wenlock Limestone	Thomas, 1998
58	6	85.7	1	14.3	7	1	Lower Devonian	Oklahoma	Adrain & Kloc, 1997
59	13	86.67	2	13.33	15	2	Middle Devonian	Spring Creek USA (zone A)	Babcock & Speyer, 1987
60	12	85.71	2	14.29	14	2	Middle Devonian	(zone B)	Babcock & Speyer, 1987
61	2	10.53	17	89.47	19	2	Middle Devonian	(zone C)	Babcock & Speyer, 1987
62	3	50	3	50	6	2	Middle Devonian	(zone D)	Babcock & Speyer 1987

63	15	78.95	4	21.05	18	2	Middle Devonian	(zone E)	Babcock & Speyer, 1987
64	8	61.54	5	38.46	13	2	Middle Devonian	(zone F)	Babcock & Speyer, 1987
65	8	57.14	4	42.86	13	2	Middle Devonian	(zone G)	Babcock & Speyer, 1987
66			204			2	Middle Devonian	Hamilton Group (New York state. USA)	Speyer, 1988
67		40		60		2	Middle Devonian	Hamilton Group (Taphofacies 2A&B)	Speyer & Brett, 1986a
68		30		70		2	Middle Devonian	Hamilton Group (Taphofacies 4)	Speyer & Brett, 1986a
69	160	33.4	221	66.6	317	2	Middle Devonian	Ahrdorf Formation (Germany)	Bruton & Haas, 1997
70		20		80	>800	3	Middle Devonian	Unit 3. Iowa/Illinois (USA).	Hickerson, 1997
71	4	44.4	5	55.6	4	2	Middle Devonian	Solo Member. Iowa/Illinois (USA).	Hickerson, 1997
72	36	97.3	1	2.7	37	1	Devonian	Falkland Isalnds	Carvalho 2006
73			Very common	50		3	Devonian	Morocco	Chatterton *et al.,* 2006
74	18	75	6	25	24	2	Devonian	Bolivia (Icla Formation)	Adrain & Edgecombe ,1996
75	6	85.7	1	14.3	7	1	Devonian	Nogueras (Spain)	Schraut & Feist, 2004
76	28	93.3	2	6.7	30	2	Devonian	Baztan (Spain)	Unpublished data
77	19	95	1	5	20	6	Lower Carboniferous	Cerro del Perna (Spain)	Hahn & Rábano, 1996
78	9	50	9	50	18		Carboniferous	Kohlenkalkes (Gemany)	Hahn & Brauckmann, 1983
79	1	50	1	50	2	1	Lower Mississipian	New México (USA)	Brezinski, 2000
80	0	0	12	100	12	1	Carboniferous	Na Pečeh (Slovenia) A	Hahn *et al.,* 1990
81	5	62.5	3	37.5	8	1	Carboniferous	Na Pečeh (Slovenia)B	Hahn *et al.,* 1990
82				100		1	Permian	Antalya (Turkey)	Rerosey-Aubril & Angiolini, 2009
83			2	100	2	1	Late Permian	West Pakistan	Grant, 1966
84	8	72.7	3	27.3	11	2	Permian	Kseloya	Bruton, 1999

Table DR3.

A

H= 19.14
Hc= 19.19

ρ= 0.00181

Mann-Whitnery pairwise comparision

	Cambrian	Ordovician	Silurian	Devonian	Carboniferous	Permian
Cambrian		0.1456	0.03604	0.001306	0.02341	0.0265
Ordovician	1		0.2233	0.007886	0.06007	0.03426
Silurian	0.5406	1		0.3408	0.2684	0.09694
Devonian	0.01959	0.1183	1		0.7942	0.09725
Carboniferous	0.3512	0.901	1	1		0.551
Permian	0.3975	0.5139	1	1	1	

B

H= 21.06
Hc= 22.11

ρ= 0.00079

Mann-Whitnery pairwise comparision

	Cambrian	Ordovician	Silurian	Devonian	Carboniferous	Permian
Cambrian		0.05099	0.01862	0.0005162	0.01572	0.0189
Ordovician	0.7649		0.2233	0.007886	0.06007	0.03426
Silurian	0.2792	1		0.3408	0.2684	0.09694
Devonian	0.007743	0.1183	1		0.7942	0.09725
Carboniferous	0.2358	0.901	1	1		0.551
Permian	0.2836	0.5139	1	1	1	

Table DR3.

c

	Sum of sqrs	df	Mean square	F	ρ
Between groups=	3834.62	4	958.906	8.393	0.007527
Within groups=	10967.7	96	114.247		
Total=	14803.3	100			
Ω2=	0.2265				

Turkey's pairwise comparision
(Q/ρ)

	Cambrian	Ordovician	Silurian	Devonian	Permian
Cambrian		0.0086	0.0002659	0.0001588	0.003663
Ordovician	4.81		0.7906	0.6057	0.9989
Silurian	6.407	1.598		0.9981	0.9112
Devonian	6.841	2.032	0.4344		0.7707
Permian	5.193	0.383	1.214	1.649	

TABLE DR4

AGE	ORDER	FAMILY	GENERA	Coaptative structures (interlocked structures)																Thoracic articulations									Enrollment-type
				Cephalon							Pygidium								total	%								total	%	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			16	17	18	19	20	21	22			
Cambrian	REDLICHIDA	OLENELLIDAE	***Nephrolenellus***	YES	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	3	20.0	NO	YES	NO	NO	YES	NO	NO	2	28.6	Cylindrical
	PTYCHOPARIIDA	ELIPSOCEPHALINAE	***Ellipsocephalus***	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	2	13.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Double
	PTYCHOPARIIDA	AGRAULIDAE?	***Crassifimbra***	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	2	13.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Double
	PTYCHOPARIIDA	SOLENOPLEURIDAE	***Badulesia***	NO	?	NO	YES	?	?	NO	NO	NO	NO	?	?	?	?	NO	2	13.3	YES	YES	YES	YES	?	NO	YES	3	42.9	Double
	PTYCHOPARIIDA	SOLENOPLEURIDAE	***Pardailhania***	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PTYCHOPARIIDA	SOLENOPLEURIDAE	***Solenopleuropsis***	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PTYCHOPARIIDA	ALOKISTOCARIDAE	**New genus new specie**	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	?	?	NO	NO	NO	1	6.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Discoidal
	REDLICHIDA	PARADOXIDIDAE	***Eccaparadoxides***	NO	NO	YES	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	4	26.7	NO	YES	NO	NO	YES	NO	NO	1	14.3	Cylindrical
	PTYCHOPARIIDA	CONOCORYPHIDAE	***Conocoryphe***	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PTYCHOPARIIDA	CONOCORYPHIDAE	***Occatharia***	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PTYCHOPARIIDA	CONOCORYPHIDAE	***Parabailella***	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PTYCHOPARIIDA	CONOCORYPHIDAE	***Ctenocephalus***	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	?	NO	NO	2	13.3	YES	YES	YES	YES	?	NO	YES	5	71.4	Spheroidal / Double
	PTYCHOPARIIDA	CONOCORYPHIDAE	***Bailiella***	YES	NO	NO	NO	NO/YES	NO/YES	YES/NO	NO	NO	NO	NO	NO	YES	YES/NO	NO	6	40.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PTYCHOPARIIDA	AGRAULIDAE	***Agraulos***	YES	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	2	13.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Double
	PTYCHOPARIIDA	AGRAULIDAE	***Skreiaspis***	YES	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	2	13.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Double
	PTYCHOPARIIDA	SOLENOPLEURIDAE	***Parasolenopleura***	?	?	NO	NO	YES	YES	YES/NO	NO	NO	NO	NO	NO	YES	YES/NO	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	5	71.4	Spheroidal / Double
	PTYCHOPARIIDA	PTYCHOPARIDAE	***Elrathia***	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	1	6.7	YES	YES	YES	YES	YES	NO	YES	5	71.4	Double
	PTYCHOPARIIDA	BURLINGIIDAE	***Schmaleensia***	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	0	0.0	NO	NO	NO	NO	NO	NO	NO	0	0.0	None
	PTYCHOPARIIDA	KINGSTONIIDAE	***Bynermina***	YES	NO	NO	NO	NO	?	NO	NO	NO	NO	NO	NO	NO	?	NO	1	6.7	?	YES	YES	YES	?	NO	YES	4	57.1	Double
	PTYCHOPARIIDA	UNCERTAIN	***Cliffia***	YES	NO	NO	NO	NO	?	NO	NO	NO	NO	NO	NO	NO	?	NO	1	6.7	?	YES	YES	YES	?	NO	YES	4	57.1	Double
	PTYCHOPARIIDA	UNCERTAIN	***Elyaspis***	YES	NO	NO	NO	NO	?	NO	NO	NO	NO	NO	NO	NO	?	NO	1	6.7	?	YES	YES	YES	?	NO	YES	4	57.1	Double
	ASAPHIDA	ASAPHIDAE	***Charchaquia***	?	?	?	NO	?	NO	NO	NO	NO	YES	NO	NO	YES	NO	NO	1	6.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Double
Ordovician	ASAPHIDA	OLENIDAE	***Leptoplastides* (=*Beltella*)**	NO	YES	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	YES	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PHACOPIDA	CALIMENIDAE	***Flexicalymene***	NO	YES	YES	YES	YES	NO	YES	NO/YES	NO	NO	NO	YES	YES	YES	NO	8	53.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	CALIMENIDAE	***Colpocoryphe***	NO	NO	YES	YES	YES	NO	YES	YES	NO	NO	NO	YES	YES	YES	NO	8	53.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Double
	PHACOPIDA	CALYMENIDAE	***Neseuretus***	NO	YES	NO	YES	YES	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	6	40.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PHACOPIDA	CALIMENIDAE	***Calymene***	NO	YES	NO	YES	YES	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	6	40.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	CALIMENIDAE	***Saltecoryphe***	NO	YES	NO	YES	YES	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	6	40.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	CALIMENIDAE	***Dipleura***	NO	NO	NO	NO	NO	?	NO	NO	YES	NO	NO	NO	NO	NO	NO	1	6.7	?	YES	NO	YES	YES	YES	YES	5	71.4	Spheroidal
	PHACOPIDA	CALIMENIDAE	***Kerfornella***	NO	YES	NO	NO	NO	?	NO	NO	YES	NO	NO	NO	NO	NO	NO	2	13.3	?	YES	NO	YES	YES	YES	YES	4	57.1	Spheroidal / Inverted
	PHACOPIDA	CALIMENIDAE	***Plaesiacomia***	NO	NO	NO	NO	NO	?	NO	YES	NO	NO	NO	NO	NO	NO	NO	1	6.7	?	YES	NO	YES	YES	NO	NO	3	42.9	Spheroidal / Inverted
	PHACOPIDA	CALIMENIDAE	***Kloucekia***	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	PLACOPARIDAE	***Placoparia***	NO	NO	NO	YES	YES	NO	YES	YES	NO	NO	NO	NO	YES	NO	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Inverted
	ASAPHIDA	ASAPHIDAE	***Anataphrus***	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	2	13.3	?	?	YES	YES	YES	YES	YES	5	71.4	Spheroidal
	ASAPHIDA	ASAPHIDAE	***Nileus***	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	YES	NO	NO	NO	NO	4	26.7	?	?	YES	YES	YES	YES	YES	3	42.9	Spheroidal
	CORYNEXOCHIIDA	ILLAENIDAE	***Stygina***	NO	NO	NO	YES	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	4	26.7	?	YES	YES	YES	YES	YES	YES	6	85.7	Spheroidal
	ASAPHIDA	RAPHIOPHORIDAE	***Damghanampyx***	YES	NO	NO	NO	?	?	NO	NO	?	NO	NO	NO	YES	NO	NO	2	13.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal

	ASAPHIDA	ASAPHIDAE	***Asaphelus***	NO	YES	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	NO	YES	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	HARPIDA	HARPIDAE	***Eoharpes***	YES	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Discoidal
	PHACOPIDA	DALMINITIDAE	***Crozaspis***	NO	YES	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	ASAPHIDA	ASAPHIDAE	***Asaphus***	NO	NO	NO	YES	NO	YES	NO	NO	NO	YES	NO	NO	NO	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	ASAPHIDA	TRINUCLEIDAE	***Botrioides***	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Discoidal
	PHACOPIDA	CALIMENIDAE	***Neseuretinus***	NO	YES	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	ASAPHIDA	ASAPHIDAE	***Isotelus* (=*Homotelus*)**	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	ASAPHIDA	TRINUCLEIDAE	***Cryptolithus***	YES	NO	NO	YES	YES	NO	YES	NO	NO	NO	YES	NO	YES	YES	NO	6	40.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Discoidal
	ASAPHIDA	REMOPLEURIDIDAE	***Hypodicranotus***	YES	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	?	YES	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	None
Silurian	CORYNEXOCHIIDA	ILLAENIDAE	***Stenopareia***	YES	NO	NO	YES	NO	YES	YES	NO	NO	NO	NO	NO	NO	YES	NO	5	33.3	NO	YES	YES	YES	YES	YES	YES	6	85.7	Spheroidal
	PHACOPIDA	ENCRINURIDAE	***Nucleurus***	NO	YES	NO	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES	NO	NO	5	33.3	YES	YES	YES	YES	YES	YES	YES	7	100.0	Spheroidal
	PHACOPIDA	CALIMENIDAE	***Diacalymene***	NO	YES	NO	YES	YES	NO	YES	NO	NO	NO	YES	YES	YES	NO	NO	7	46.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Double
	PROETIDA	AULACOPLEURIDAE	***Aulacopleura***	YES	NO	NO	?	?	?	NO	NO	NO	NO	YES?	NO	NO	?	NO	2	13.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Double
	PHACOPIDA	CALIMENIDAE	***Papillicalymene***	NO	YES	NO	NO	YES	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	ENCRINURIDAE	***Struszia***	NO	NO	NO	YES	NO	NO	NO	YES/NO	NO	NO	YES	NO	YES	NO	YES/NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PHACOPIDA	ENCRINURIDAE	***Frammia***	NO	NO	NO	YES	NO	NO	NO	YES/NO	NO	NO	YES	NO	YES	NO	YES/NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PHACOPIDA	CALIMENIDAE	***Calymene***	NO	YES	NO	YES	YES	NO	YES	YES/NO	NO	NO	YES/NO	YES	YES	NO	NO	8	53.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Bumastus***	NO	YES	NO	YES	YES	NO	YES	YES/NO	NO	NO	NO	YES	YES	NO	NO	7	46.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Dalmanites***	NO	NO	NO	NO	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Eophacops***	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	5	33.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal
	PHACOPIDA	DALMINITIDAE	***Acaste***	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	5	33.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal
	PHACOPIDA	CALIMENIDAE	***Trimerus***	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	YES	4	26.7	YES	YES	YES	YES	YES	YES	YES	6	85.7	Spheroidal
	PHACOPIDA	ENCRINURIDAE	***Encrinurus* (=*Saoria*)**	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	YES/NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	5	71.4	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Acernaspis* (=*Eskaspis; =Otadenus*)**	NO	YES*	NO	YES	NO	YES	YES	NO	NO	NO	YES	YES	YES	NO	NO	7	46.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	AULACOPLEURIDAE	***Malimanaspis* (=*Goodsiraspis*)**	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	NO	NO	YES	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Double
	LICHIDA	ODONTOPLEURIDAE	***Leonaspis*(=*Acanthaloma*)**	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	YES	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	HARPIDA	HARPIDAE	***Lioharpes* (=*Fritchaspis*)**	YES	NO	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Discoidal
	PROETIDA	AULACOPLEURIDAE	***Latiproetus***	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	5	33.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal
	HARPIDA	HARPIDAE	***Bohemoharpes* (=*Declivoharpes*)**	YES	NO	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	YES	NO	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Discoidal
Devonian	PHACOPIDA	PHACOPIDAE	***Phacops***	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	5	33.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal
	PHACOPIDA	DALMINITIDAE	***Greenops***	NO	NO	NO	NO	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Gesops***	NO	YES	NO	NO	NO	YES	YES	NO	NO	YES	NO	YES	NO	NO	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	AULACOPLEURIDAE	***Cyphaspis* (=*Novakaspis*)**	YES	NO	NO	NO	YES	YES	YES	NO	YES	NO	NO	NO	YES	YES	NO	7	46.7	YES	YES	YES	YES	YES	NO	YES	5	71.4	Double
	PHACOPIDA	DALMINITIDAE	***Acastoides***	NO	NO	NO	NO	YES	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	4	26.7	YES	YES	YES	YES	NO	NO	YES	5	71.4	Inverted
	PHACOPIDA	ASTEROPIGIDAE	***Coltraneia***	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Reedops***	NO	YES	NO	YES	YES	YES	NO	NO	NO	NO	YES	YES	YES	YES	NO	8	53.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Austerops***	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	YES	YES	YES	NO	7	46.7	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Boeckops***	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	YES	YES	YES	NO	7	46.7	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal
	CORYNEXOCHIIDA	STYGINIDAE	***Scabriscutellum* (=*Dicranactis*)**	NO	NO	NO	YES	NO	YES	YES	NO	NO	YES	YES?	NO	NO	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PROETIDAE	***Eoproetus* (=*Proetus*)**	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	5	33.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal
	PHACOPIDA	PHACOPIDAE	***Barrandeops***	NO	YES	NO	YES	YES	YES	NO	NO	NO	NO	YES	YES	YES	YES	NO	8	53.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Spheroidal

	PHACOPIDA	ASTEROPIGIDAE	***Hollardops* (=*Modellops*)**	NO	NO	NO	NO	NO	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	2	13.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PROETIDAE	***Diademaproetus***	YES	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Double
	PHACOPIDA	HOMALONITIDAE	***Parahomalonotus***	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	YES/NO	5	33.3	YES	YES	YES	YES	NO	YES	YES	6	85.7	Spheroidal
	PHACOPIDA	DALMINITIDAE	***Frenestraspis***	NO	YES	NO	NO	NO	YES	YES	NO	NO	NO	NO	YES	NO	NO	YES/NO	5	33.3	YES	YES	YES	YES	NO	YES	YES	6	85.7	Spheroidal
	PROETIDA	PROETIDAE	***Timsaloproetus***	YES	NO	NO	NO	YES	YES	NO	NO	YES	NO	NO	NO	NO	YES	NO	5	33.3	YES	YES	YES	YES	NO	NO	YES	5	71.4	Double
	PHACOPIDA	ASTEROPIGIDAE	***Kayserops***	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal / Double
	PROETIDA	AULACOPLEURIDAE	***Maurotarion* (=*Goniopleura*)**	YES	NO	NO	YES	NO	YES	NO	NO	NO	NO	YES	NO	NO	NO	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PHACOPIDA	ENCRINURIDAE	***Wallacia***	NO	YES	NO	YES	YES	NO	NO	YES/NO	NO	NO	NO	NO	YES	NO	YES/NO	6	40.0	YES	YES	YES	YES	YES	YES	YES	7	100.0	Spheroidal
	HARPIDA	HARPIDAE	***Globoharpes***	YES	NO	NO	YES	NO	YES	NO	NO	NO	YES	NO	NO	YES	NO	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Discoidal
	HARPIDA	HARPIDAE	***Eskoharpes***	YES	NO	NO	YES	NO	YES	NO	NO	NO	YES	NO	NO	YES	NO	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Discoidal
Carboniferous	PROETIDA	PROETIDAE	***Rhenogriffides***	?							?								?		YES	YES	YES	?	YES?	NO	YES?	5	71.4	Spheroidal
	PROETIDA	PROETIDAE	***Pitonia***																		YES	YES	YES	?	YES?	NO	YES?	5	71.4	Spheroidal
	PROETIDA	PROETIDAE	***Bollandia***																		YES	YES	YES	?	YES?	NO	YES?	5	71.4	Spheroidal
	PROETIDA	PROETIDAE	***Griffithides***	NO	NO	NO	NO	NO	YES	NO	YES	NO	NO	NO	YES	NO	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	5	71.4	Spheroidal
	PROETIDA	PROETIDAE	***Kaskia***	NO	NO	NO	NO	NO	YES	NO	YES	NO	NO	NO	YES	NO	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PROETIDAE	***Exochops***	NO	NO	NO	NO	NO	YES	NO	?	?	?	?	?	?	YES?	YES	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PROETIDAE	***Griffithides***	NO	YES	NO	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES	YES	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PROETIDAE	***Ameura***	NO	NO	NO	NO	NO	YES	NO	YES	NO	NO	NO	YES	NO	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Inverted
Permian	PROETIDA	PHILLIPSIIDAE	***Ditomopyge***	NO	YES	NO	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES	YES	3	20.0	YES	YES	YES	YES	YES	NO	YES	5	71.4	Spheroidal
	PROETIDA	PHILLIPSIIDAE	***Triproetus***	YES	NO	NO	NO	NO	YES	NO	YES	NO	NO	YES	NO	NO	YES	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Inverted
	PROETIDA	BACHYMETOPIDINAE	***Anisopyge***	NO	NO	NO	NO	NO	YES	NO	YES	NO	NO	YES	NO	NO	YES	YES	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Inverted
	PROETIDA	PHILLIPSIIDAE	***Paladin***	YES	NO	NO	NO	?	YES	NO	NO	NO	YES	NO	YES	NO	YES	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PHILLIPSIIDAE	***Pseudophillipsia***	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	3	20.0	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PHILLIPSIIDAE	***Camsellia***	NO	NO	NO	NO	NO	YES	NO	YES	NO	NO	YES	NO	NO	YES	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PHILLIPSIIDAE	***Ameura***	NO	NO	NO	NO	NO	YES	NO	YES	NO	NO	?	NO	NO	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Inverted
	PROETIDA	PHILLIPSIIDAE	***Cummingella***	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PHILLIPSIIDAE	***Xiangzhongella***	NO	YES	NO	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Inverted
	PROETIDA	PHILLIPSIIDAE	***Gapeevella***	NO	YES	NO	NO	NO	YES	NO	NO	NO	YES	YES	NO	NO	YES	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PHILLIPSIIDAE	***Timoraspis***	YES	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES	NO	NO	YES	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PHILLIPSIIDAE	***Inaraspidion***	YES	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES	NO	NO	YES	NO	5	33.3	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal
	PROETIDA	PHILLIPSIIDAE	***Kathawaia***	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	YES	NO	4	26.7	YES	YES	YES	YES	YES	NO	YES	6	85.7	Spheroidal

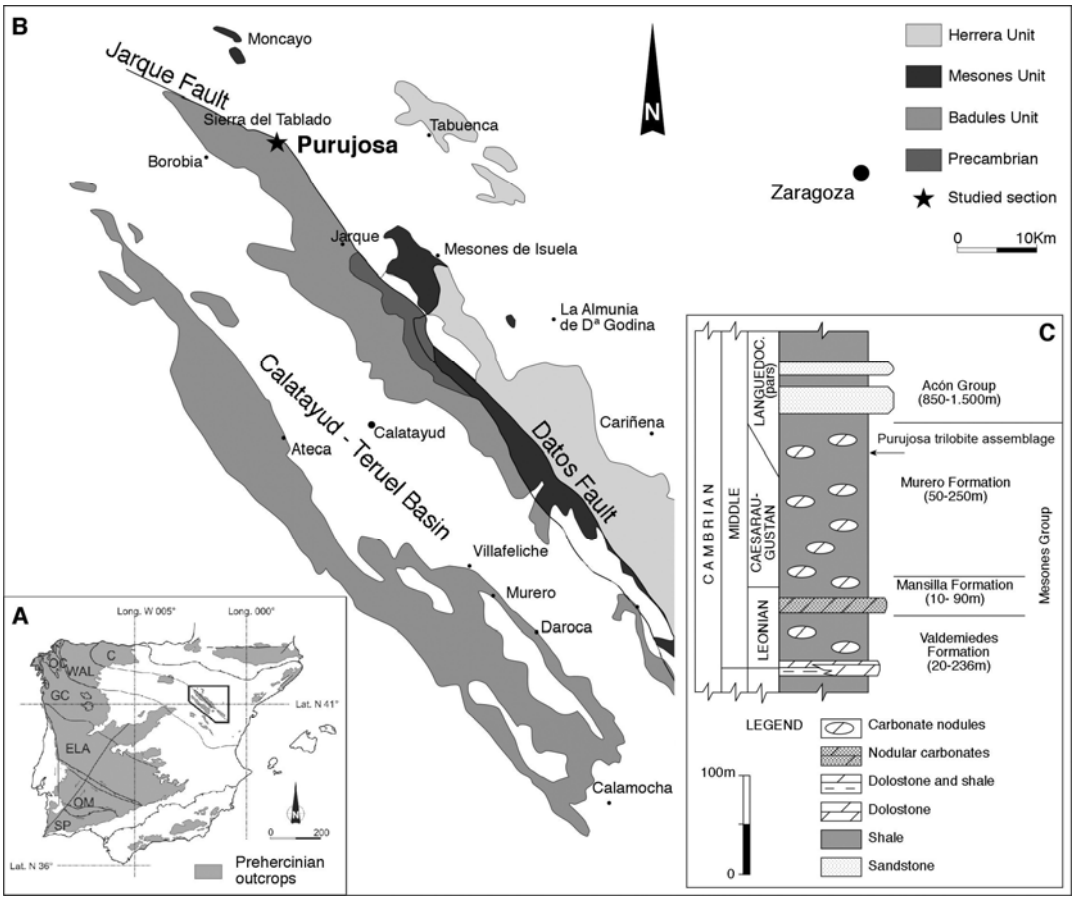

Figure DR1. Geological map, showing the pre-Hercynian outcrops and the Iberian Chains in the NE Spain. B: Geological setting of Purujosa Assemblage (Pur 3) in the Iberian Chains. C: Synthetic column with middle Cambrian Formations and Mediterranean substages.

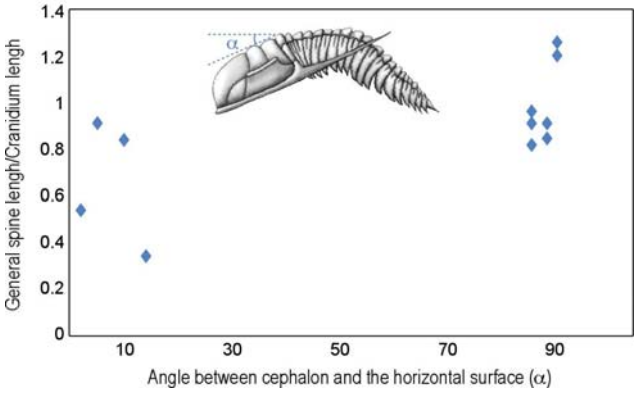

Figure DR2. Bivariate plot showing the relationship between the ratio genal spine length/cranidium length and the angle between cephalon and the horizontal surface, suggesting that those trilobites with long genal spines consistently enrolled with the cephalon aligned to the sediment-water interface (α).

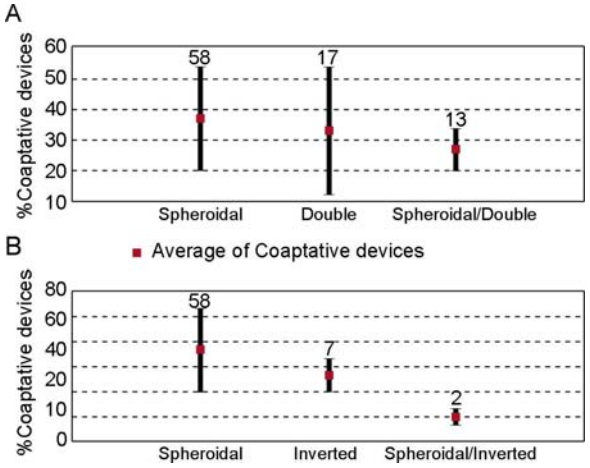

Figure DR3. A: Average deviation about the number of enrolled trilobites in those localities with articulated specimens (see Table DR2 for data) for all periods considered. B: Relationship between sample size and degree of variation in the mean number of enrolled trilobites within samples for each of the periods considered. For this analysis the mean number of enrolled specimens was drawn at random from the pool of localities 20 times at each sampling increment. Progressing along the x axis, three additional localities were added to the pool from which the 20 samples were draw randomly. Vertical bars express the standard deviation of the 20 averages of mean enrolled specimen number for each sample increment.

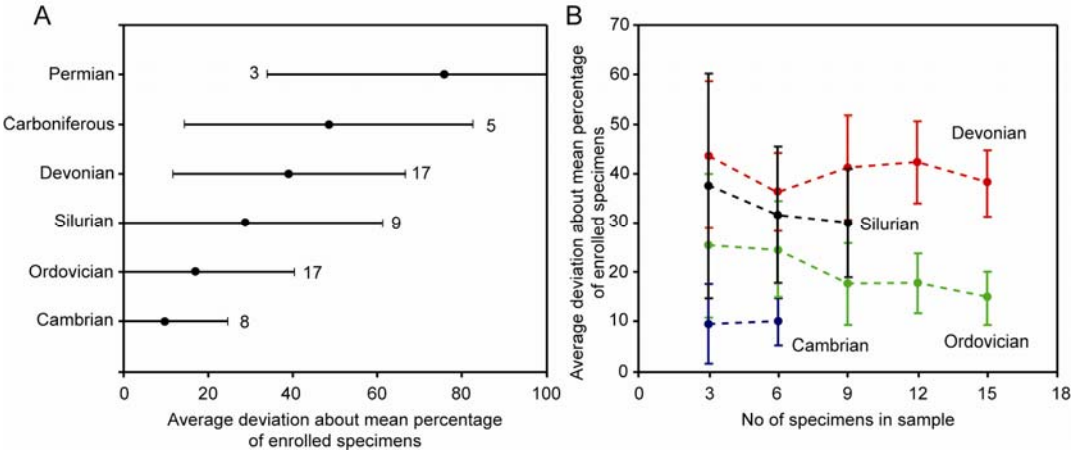

Figure DR4. A-B: Plots of the percentage ranges of all coaptative devices (A) and percentage range of all thoracic articulations (B) with the average of each period and comparison with Purujosa percentage ranges. The average increases through the Paleozoic and stabilized in the post-Cambrian. Note that the Purujosa trilobite assemblage shows a higher average than that of Cambrian as a whole in the number of coaptative devices. The percentages are taken from different genera belonging to all orders of trilobites excluding agnostinids (n=106 and n=109 respectively) throughout Palaeozoic (see Table DR4 for data). C: Average deviation about mean percentage of the total range of coaptative devices known in the genera from each period.

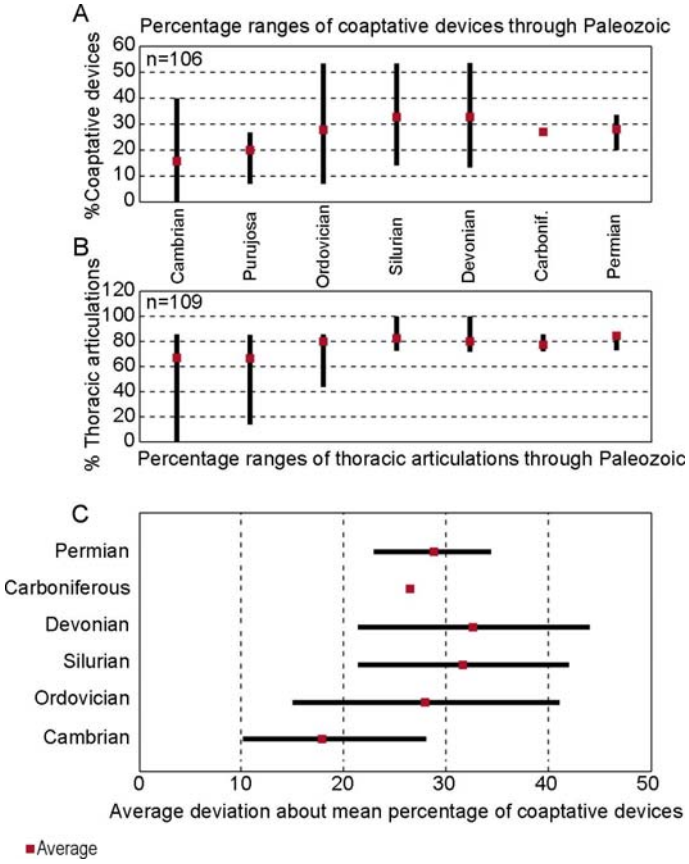

Figure DR5. Average percentage of the total range of coaptative devices displayed according to enrollment style. The enrollment in trilobites could be divided in A: Trilobites that enroll by double or spheroidal types only, and those that enrolled in mixed mode and B: Trilobites that enroll purely spheroidal or inverted types only and those that enrolled in mixed mode. Note that those trilobites able to enroll in two different types had lower mean percentages of the total number of coaptative devices. Vertical bars express standard error.

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