

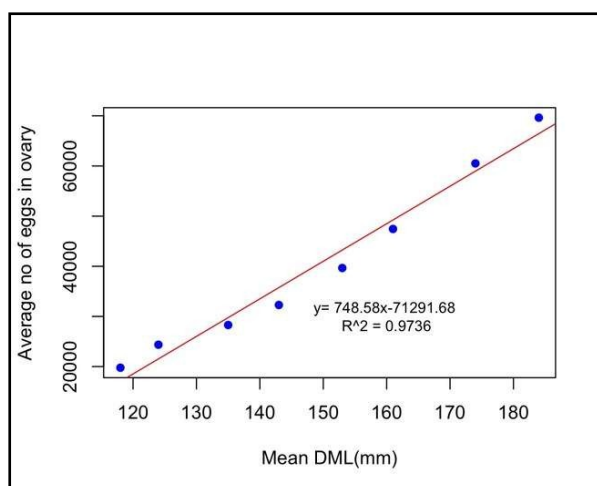
Spawning dynamics and maturity patterns of the Indian squid, *Uroteuthis (Photololigo) duvaucelii* (A. d'Orbigny, 1835), along the southeastern coast of India

R. John Peter • A. John Chembian • K. Silambarasan • A. Tiburtius

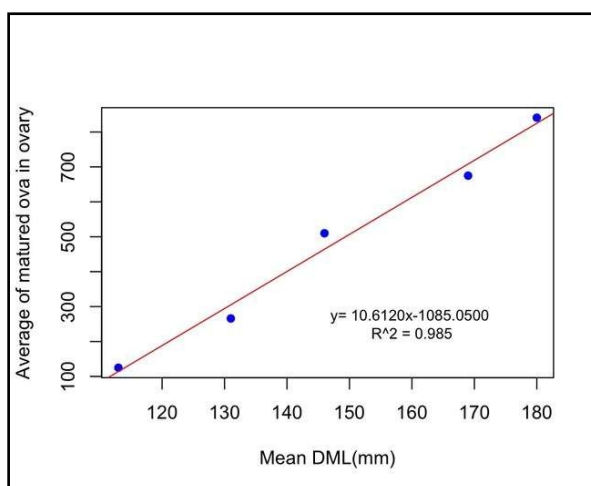
Fishery Survey of India, Royapuram, Chennai, Tamil Nadu 600 013, India

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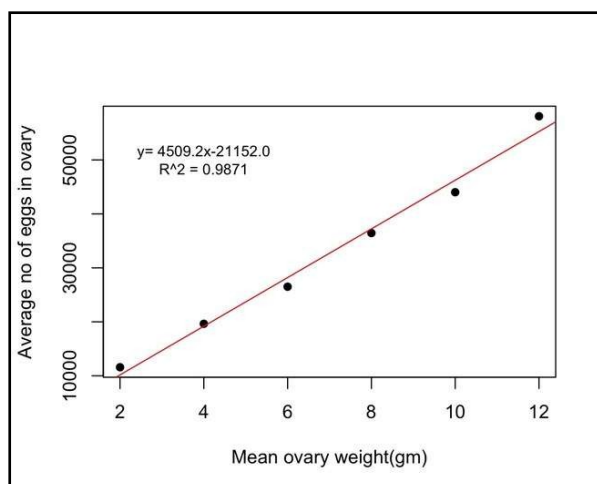
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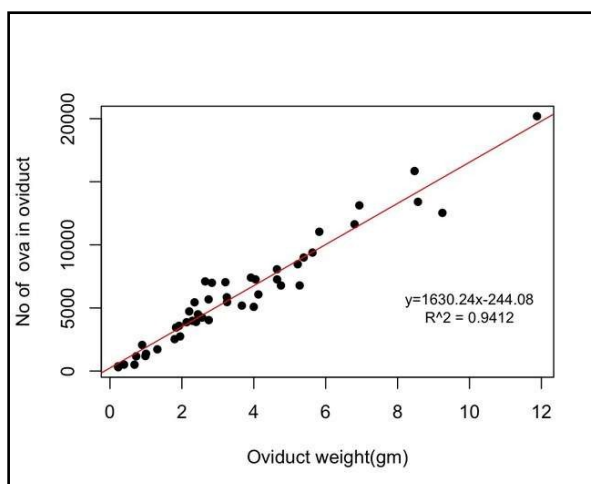
(a)



(b)

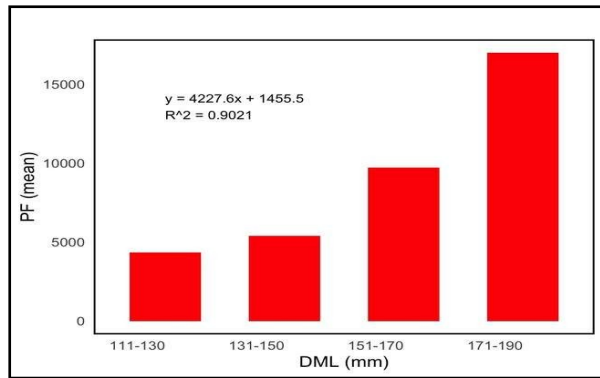


(c)

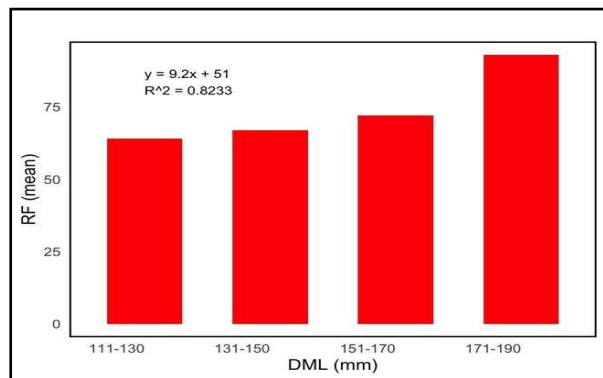


(d)

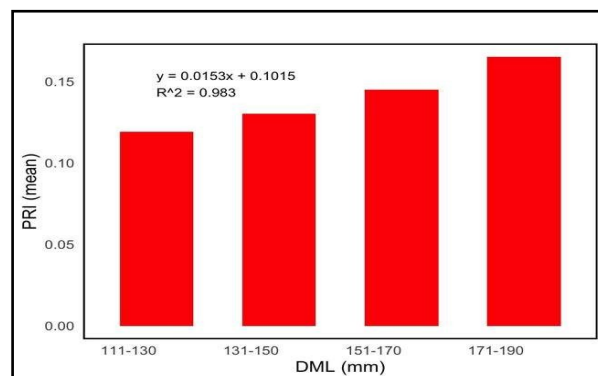
FIGURE S1 (A) Mean DML proportional to average no of eggs in ovary (B) Mean DML proportional to average of matured ova in ovary (C) Estimation of mean ovary weight proportional to average no of eggs in ovary (D) Estimation of Oviduct weight proportional to no. of ova in oviduct



(a)

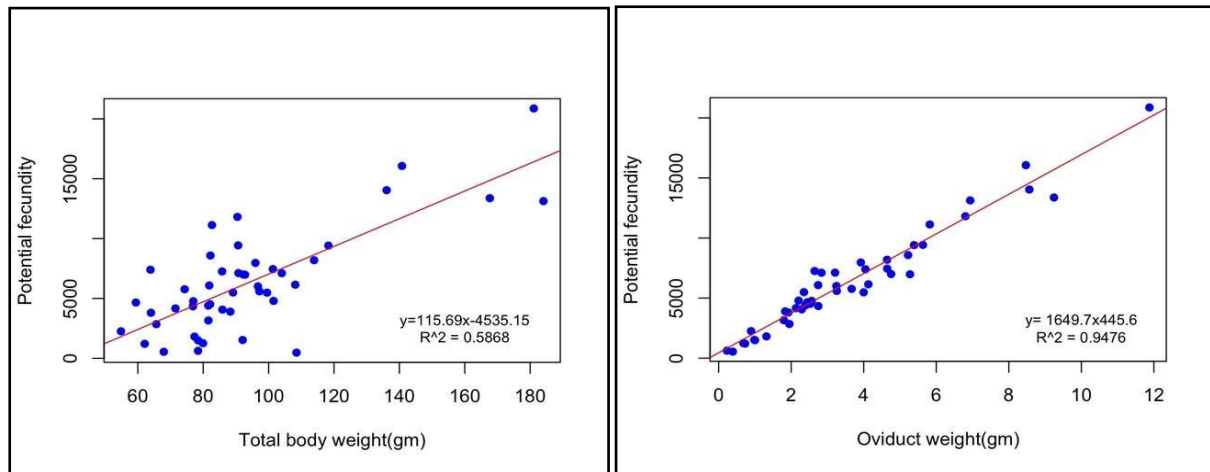


(b)



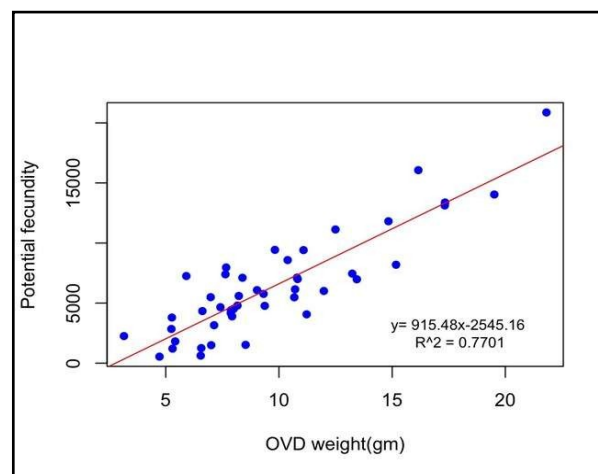
(c)

FIGURE S2 (A) Estimation of Potential fecundity (PF) mean in relation to DML range (B) Estimation of Relative fecundity (RF) mean in relation to DML range (C) Estimation of Index of potential reproductive investment (PRI) mean in relation to DML range



(a)

(b)



(c)

FIGURE S3 (A) Estimation of total body weight versus Potential fecundity (PF) (B) Estimation of oviduct weight versus Potential fecundity (PF) (C) Estimation of ovary and oviduct weight (OVD) versus Potential fecundity (PF)

TABLE S1 Summary of Maturity Indices for Female and Males of *Uroteuthis duvaucelii*.

Indices	Maturity stages	Minimum	Maximum	Mean	SD	n
ANGWI	I	-	-	-	-	113
	II	0.002	0.043	0.012	0.011	40
	III	0.003	0.076	0.029	0.019	54
	IV	0.002	0.068	0.040	0.018	20
	V	0.016	0.214	0.081	0.039	95
NGWI	I	0.002	0.190	0.042	0.039	73
	II	0.014	0.737	0.160	0.163	125
	III	0.129	2.022	0.810	0.438	58
	IV	0.881	2.77	1.744	0.476	20
	V	0.925	6.412	3.318	1.243	96
OWI	I	0.008	0.08	0.033	0.018	20
	II	0.004	0.834	0.114	0.129	102
	III	0.035	5.155	1.868	1.450	57
	IV	2.247	6.749	4.676	1.335	20
	V	2.786	12.09	6.66	1.80	96
OCWI	I	0.004	0.154	0.048	0.039	47
	II	0.006	1.542	0.219	0.259	127
	III	0.150	7.345	2.571	1.834	58
	IV	3.572	10.673	6.801	1.92	20
	V	4.891	25.99	14.24	4.34	96
RSWI	I	0.002	0.354	0.080	0.079	74
	II	0.041	2.901	0.470	0.50	124
	III	0.316	15.44	5.47	3.93	58
	IV	7.625	22.27	14.43	4.070	20
	V	10.66	57.97	28.414	9.03	96
TWI	I	0.008	0.480	0.078	0.135	11
	II	0.043	1.106	0.329	0.216	56
	III	0.113	1.007	0.584	0.196	88
	IV	0.210	1.038	0.665	0.166	127
	V	0.276	1.543	0.84	0.175	79
SPCWI	I	0.009	0.225	0.052	0.08	7

	II	0.011	0.959	0.154	0.145	56
	III	0.047	0.968	0.405	0.199	85
	IV	0.159	1.553	0.607	0.235	128
	V	0.335	1.602	0.686	0.223	78

TABLE S2 Summary of Relationship between DML, mean RSWI of Female and mean TWI, SPCWI of males

DML (mm)	RSWI	TWI	SPCWI
	Mean	Mean	Mean
51-70	0	0.45	0.25
71-90	2	0.53	0.34
91-110	4	0.59	0.57
111-130	11	0.58	0.56
131-150	22	0.63	0.53
151-170	27	0.68	0.43
171-190	28	0.65	0.51
191-210	-	0.63	0.59
211-230	-	0.59	0.58

TABLE S3 Summary of Month wise Maturity Indices for Females and Males of *Uroteuthis duvaucelii*.

Months	ANGWI		NGWI		OWI		OCWI		RSWI		TWI		SPCWI	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Nov'18	0.05	0.04	1.63	1.74	3.25	3.50	5.96	6.5	12.7	13.7	0.62	0.15	0.73	0.19
Dec'18	0.04	0.04	1.61	1.59	3.43	3.51	6.24	6.95	12.94	14	0.71	0.29	0.65	0.37
Jan'19	0.07	0.06	2.47	2.16	4.86	3.61	9.58	8.76	20.45	17.9	0.72	0.30	0.52	0.32
Feb'19	0.13	0.15	2.43	2.15	7.31	2.79	12.59	8.40	20.52	19.1	0.41	0.32	0.36	0.34
Mar'19	0.04	0.02	1.21	1.63	3.22	3.75	5.35	7.23	10.35	14.5	0.57	0.29	0.35	0.26

Apr'19	0.04	0.02	2.00	0.98	5.58	1.66	10.05	3.89	19.8	7.07	0.69	0.11	0.53	0.17
May'19	0.04	0.02	0.57	0.92	2.41	2.9	2.55	4.48	4.21	8.15	0.52	0.2	0.46	0.28
Jun'19	0.07	0.04	0.81	1.43	2.12	2.82	3.42	5.74	5.88	10.7	0.53	0.24	0.41	0.31
Jul'19	0.05	0.03	0.77	1.06	1.48	2.09	2.72	4.12	5.18	8.02	0.54	0.21	0.47	0.39
Aug'19	0.04	0.03	0.892	1.03	2.03	2.35	3.14	3.97	6.46	8.15	0.50	0.21	0.44	0.3
Sep'19	0.03	0.02	1.08	1.68	1.77	2.22	3.62	5.80	7.32	11.3	0.48	0.24	0.45	0.52
Oct'19	0.02	0.02	0.44	0.85	0.77	1.84	1.40	3.92	2.84	7.55	0.65	0.18	0.52	0.20
Nov'19	0.01	0.01	0.63	0.87	1.39	2.48	2.28	4.26	4.77	8.61	0.62	0.17	0.80	0.15
Dec,19	0.03	0.03	1.47	1.26	3.49	2.45	6.86	7.13	15.84	11.8	0.48	0.25	0.50	0.20
Jan'20	0.04	0.02	0.74	0.64	2.22	2.67	2.54	3.76	5.41	8.05	0.81	0.16	0.69	0.39
Feb'20	0.07	0.02	0.96	1.59	5.94	0.40	5.20	7.51	7.30	12.6	0.41	0.20	0.31	0.26
Jun'20	0.01	0.01	0.15	0.22	0.10	0.10	0.21	0.30	0.43	0.63	0.49	0.15	0.32	0.18
Jul'20	0.002	-	0.08	0.05	0.07	0.04	0.13	0.09	0.26	0.19	0.47	0.16	0.34	0.19
Aug'20	0.03	0.02	1.02	1.37	3.09	2.39	4.42	5.63	6.37	9.82	0.39	0.11	0.56	0.23
Sep'20	0.008	0.004	0.4	0.55	0.66	1.04	0.98	1.45	2.12	3.2	0.49	0.05	0.41	0.18
Oct'20	0.03	0.02	0.52	0.72	0.95	1.77	1.45	2.51	3.13	5.43	0.67	0.10	0.50	0.18

TABLE S4 Summary of Total weight (gm), Oviduct weight (gm), Ovary and oviduct weight (OVD) (gm) and Potential fecundity (PF) against DML.

DML (mm)	DML (mm) Mean	Total weight (gm)			Oviduct weight (gm)			Ovary and oviduct weight (OVD) (gm)			Potential fecundity
		Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Mean
101- 130	121.3	54.8	82.7	67.31	0.23	5.82	2.25	3.15	12.50	6.75	4343
131- 160	140.5	62.1	140.8	91.69	0.22	8.57	3.41	4.81	19.51	9.42	5884
161- 190	178.3	167.7	184.1	177.6	6.94	11.88	9.35	7.66	21.82	16.03	15789