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**SUPPLEMENTARY MATERIAL**

**corresponding to:**

**Evolutionary trend for metamery reduction and  
gonad shortening in Anurans revealed by  
comparison of gonad development**

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TABLE S1

**THE NUMBER OF GONOMERES, LENGTH OF THE UNDIFFERENTIATED GONADS, TESTES, OVARIES AND MESONEPHROI IN *BOMBINA BOMBINA* TADPOLES. N – NUMBER OF STUDIED SPECIMENS, G/M LENGTH RATIO – RATIO OF THE GONADAL AND MESONEPHRIC LENGTH**

	Gosner Stage	N	Left Gonad						Right Gonad						Left Mesonephros			Right Mesonephros			G/M Length Ratio
			No of Gonomeres			Gonad Length (µm)			No of Gonomeres			Gonad Length (µm)			Length (µm)			Length (µm)			
			Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	
Undiff.	26	7	0	0	0	538-571	555.43	13.16	0	0	0	535-570	550.43	11.02	567-587	581.00	10.41	567-582	577.00	6.73	0.95
	30	9	5-6	5.77	0.44	558-578	563.33	8.26	5-6	6	0.70	550-570	561.66	7.87	605-626	616.44	7.23	600-625	610.88	6.33	0.92
	33	4	5-6	5.75	0.50	610-643	627.75	14.41	5-6	5.75	0.50	610-639	623.00	13.09	650-668	657.00	7.44	650-669	657.17	6.94	0.95
Testis	34	6	0	0	0	486-550	515.50	22.50	0	0	0	485-552	510.83	24.98	760-769	764.83	6.65	751-769	759.00	6.60	0.67
	37	4	0	0	0	242-267	254.50	10.85	0	0	0	240-265	252.50	10.60	975-994	986.50	8.19	970-1100	1007.75	61.70	0.26
	40	4	0	0	0	283-301	322.50	7.77	0	0	0	279-298	285.75	8.73	1526-1549	1535.75	10.14	1526-1548	1534.50	9.57	0.30
	44	3	0	0	0	364-385	376.00	10.82	0	0	0	360-383	372.00	9.83	1576-1598	1586.00	11.14	1580-1600	1588.33	10.40	0.37
	46	3	0	0	0	387-421	402.66	17.16	0	0	0	385-415	399.50	13.08	1587-1615	1600.66	14.01	1576-1612	1595.00	18.08	0.25
Ovary	34	4	5-6	5.75	0.50	854-892	872.75	15.65	6	6	0	855-888	871.50	11.54	760-770	766.00	4.55	757-768	761.75	4.65	1.14
	37	5	6	6	0	971-997	982.00	12.27	5-6	5.83	0.41	970-992	984.40	9.32	974-995	985.60	8.50	970-995	985.00	9.34	0.99
	40	5	6	6	0	980-1134	1055.55	72.64	6	6	0	978-1127	1039.00	69.12	1529-1545	1538.00	5.79	1531-1543	1537.20	5.76	0.97
	44	3	6	6	0	1005-1230	1119.00	112.53	6	6	0	1002-1232	1111.33	115.42	1579-1595	1586.00	8.19	1575-1592	1583.66	8.50	0.70
	46	6	6	6	0	1145-1258	1235.00	63.64	6	6	0	1136-1249	1197.66	45.99	1576-1625	1600.33	17.00	1575-1620	1597.50	16.45	0.76

TABLE S2

**THE NUMBER OF GONOMERES, LENGTH OF THE UNDIFFERENTIATED GONADS, TESTES, OVARIES  
AND MESONEPHROI IN *XENOPUS LAEVIS* TADPOLES**

	NF Stage	N	Left Gonad						Right Gonad						Left Mesonephros			Right Mesonephros			G/M Length Ratio
			No of Gonomeres			Gonad Length ( $\mu\text{m}$ )			No of Gonomeres			Gonad Length ( $\mu\text{m}$ )			Length ( $\mu\text{m}$ )			Length ( $\mu\text{m}$ )			
			Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	
Undiff.	49	11	0	0	0	605-634	620.60	7.03	0	0	0	605-630	616.10	6.23	698-714	706.30	6.62	682-709	704.00	9.61	0.88
	50	10	13-14	13.80	0.42	641-652	649.30	2.98	13-14	13.80	0.42	632-652	639.20	7.11	701-728	711.40	9.48	697-719	710.00	8.52	0.89
	53	1	14	14.00	0	710	710.00	0	14	14	0	705	705	0	810	810.00	0	804	804.00	0	0.89
Testis	53	4	0	0	0	680-712	699.20	7.73	0	0	0	680-710	696.50	7.47	803-827	818.00	11.49	794-821	812.75	12.82	0.86
	55	7	0	0	0	663-696	685.57	11.01	0	0	0	659-695	684.86	12.25	954-975	964.29	8.83	955-973	962.86	7.20	0.71
	58	3	0	0	0	638-672	655.33	17.00	0	0	0	632-671	654.33	20.11	1202-1236	1221.00	17.35	1202-1230	1219.00	14.93	0.53
	60	4	0	0	0	574-626	602.00	22.58	0	0	0	572-617	598.00	21.02	1857-1895	1874.00	16.02	1847-1887	1860.25	18.32	0.32
	64	4	0	0	0	732-774	750.75	19.35	0	0	0	724-749	746.25	21.14	2884-2918	2900.50	13.89	2863-2876	2874.00	7.96	0.25
	66	3	0	0	0	878-914	895.66	18.01	0	0	0	857-901	879.33	22.01	3467-3578	3515.00	57.00	3465-3495	3480.00	15.00	0.25
Ovary	53	4	13-14	13.75	0.50	706-738	723.75	13.23	13-14	13.75	0.50	698-725	714.75	11.76	803-831	819.75	13.35	794-821	810.50	11.62	0.88
	55	5	13-14	13.80	0.45	849-886	860.40	16.16	14	14.00	0	849-880	859.00	12.10	965-979	967.86	7.65	955-975	965.57	6.53	0.89
	58	3	14	14.00	0	932-987	956.33	28.04	14	14.00	0	932-980	950.33	25.93	1230-1289	1265.67	31.37	1197-1244	1223.67	24.13	0.77
	60	5	14	14.00	0	1754-1812	1784.20	20.79	14	14.00	0	1777-1798	1782.80	12.91	2234-2387	2288.00	60.76	2234-2299	2270.40	29.75	0.78
	64	4	13-14	13.75	0.50	2154-2278	2214.25	51.68	13-14	13.75	0.50	2197-2234	2188.25	46.70	2498-2613	2526.75	56.84	2450-2598	2512.00	61.99	0.87
	66	2	14	14.00	0	3006-3198	3114.75	79.76	14	14.00	0	3000-3085	3042.50	60.10	3489-3567	3528.00	55.15	3476-3489	3482.50	9.19	0.88

TABLE S3

**THE NUMBER OF GONOMERES, LENGTH OF THE UNDIFFERENTIATED GONADS, TESTES, OVARIES AND MESONEPHROI IN  
*PELOBATES FUSCUS* TADPOLES**

	Gosner Stage	N	Left Gonad						Right Gonad						Left Mesonephros			Right Mesonephros			G/M Length Ratio
			No of Gonomeres			Gonad Length ( $\mu\text{m}$ )			No of Gonomeres			Gonad Length ( $\mu\text{m}$ )			Length ( $\mu\text{m}$ )			Length ( $\mu\text{m}$ )			
			Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	
Undiff.	26	3	0	0	0	712-736	723.66	12.01	0	0	0	700-715	708.33	7.64	1385-1406	1396.33	10.59	1376-1400	1391.33	13.32	0.52
	30	2	10-11	10.50	0.71	741-758	749.50	12.02	11	11.00	0	729-743	736.00	9.89	1443-1459	1451.00	11.31	1439-1455	1447.00	11.31	0.51
	33	4	10-11	10.75	0.50	764-784	775.00	8.25	10-11	10.75	0.50	759-778	770.25	8.66	1539-1556	1547.50	6.95	1531-1549	1539.25	7.41	0.50
Testis	34	1	0	0	0	780	780.00	0	0	0	0	775	775.00	0	1598	1598.00	0	1581	1581.00	0	0.48
	40	3	0	0	0	2791-808	2800.00	7.59	0	0	0	2787-803	2795.00	6.88	7498-7511	7504.88	6.78	7448-7471	7464.12	6.01	0.37
	44	4	0	0	0	2798-813	2806.00	7.12	0	0	0	2798-809	2802.00	6.56	9200-9241	9218.12	21.89	9195-9240	9213.15	21.08	0.30
Ovary	33	2	11	11.00	0	755-761	758.00	4.24	11	11.00	0	751-758	754.50	4.95	1481-1496	1488.50	10.60	1472-1489	1480.50	12.02	0.51
	34	5	10-11	10.8	0.45	843-865	851.60	8.08	10-11	10.80	0.45	835-856	846.80	8.04	1593-1607	1600.00	4.95	1579-1602	1593.40	10.28	0.53
	37	4	11	11.00	0	2423-2476	2455.25	18.02	11	11.00	0	2403-2426	2412.75	9.64	4864-4882	4874.25	7.50	4852-4861	4856.25	3.68	0.50
	44	3	11	11.00	0	4624-4697	4667.00	38.19	11	11.00	0	4534-4570	4569.66	35.50	9203-9248	9228.66	23.16	9198-9241	9223.00	22.34	0.50

TABLE S4

**THE NUMBER OF GONOMERES, LENGTH OF THE UNDIFFERENTIATED GONADS, TESTES, OVARIES  
AND MESONEPHROI IN Hyla arborea TADPOLES**

Gosner Stage	N	Left Gonad						Right Gonad						Left Mesonephros			Right Mesonephros			G/M Length Ratio
		No of Gonomeres			Gonad Length ( $\mu\text{m}$ )			No of Gonomeres			Gonad Length ( $\mu\text{m}$ )			Length ( $\mu\text{m}$ )			Length ( $\mu\text{m}$ )			
		Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	
26	9	0	0	0	415-424	419.55	2.45	0	0	0	402-412	407.00	2.50	815-829	820.77	3.70	795-809	801.22	3.53	0.50
30	12	0	0	0	476-498	489.40	5.34	0	0	0	461-478	469.90	4.01	868-896	880.40	6.65	851-975	863.40	5.79	0.55
33	10	0	0	0	565-589	580.30	7.05	0	0	0	546-564	558.50	5.06	1238-1249	1244.70	2.66	1215-1234	1227.30	4.72	0.45
34	6	0	0	0	638-662	650.66	7.76	0	0	0	600-615	611.66	6.05	1396-1408	1400.66	3.93	1342-1350	1343.33	3.26	0.45
37	3	0	0	0	734-758	746.66	12.05	0	0	0	709-739	724.00	15.00	1863-1879	1870.66	8.02	1803-1825	1813.33	11.06	0.40
40	7	0	0	0	1105-1137	1123.14	9.53	0	0	0	1075-1105	1076.57	14.39	2661-2685	2675.14	8.19	2548-2579	2561.00	9.11	0.42
44	8	0	0	0	1284-1323	1300.87	10.55	0	0	0	1265-1285	1278.00	5.66	3243-3267	3251.25	6.82	3187-3205	3197.50	4.89	0.40
46	7	0	0	0	1528-1549	1543.14	6.84	0	0	0	1489-1512	1501.00	7.00	3685-3711	3697.28	7.52	3571-3592	3585.43	6.63	0.42

TABLE S5

**THE NUMBER OF GONOMERES, LENGTH OF THE UNDIFFERENTIATED GONADS, TESTES, OVARIES  
AND MESONEPHROI IN BUFOTES VIRIDIS TADPOLES**

Gosner Stage	N	Left Gonad						Right Gonad						Left Mesonephros			Right Mesonephros			G/M Length Ratio
		No of Gonomeres			Gonad Length ( $\mu\text{m}$ )			No of Gonomeres			Gonad Length ( $\mu\text{m}$ )			Length ( $\mu\text{m}$ )			Length ( $\mu\text{m}$ )			
		Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	
26	10	0	0	0	400-410	405.10	2.51	0	0	0	391-398	395.20	1.81	563-575	570.60	2.95	560-572	564.70	3.30	0.70
30	10	0	0	0	485-493	489.60	2.01	0	0	0	453-476	467.30	5.63	705-718	712.70	3.13	695-703	699.80	1.93	0.68
33	5	0	0	0	567-582	570.60	5.64	0	0	0	561-574	567.80	4.60	842-858	850.00	5.66	832-842	837.60	3.58	0.67
34	9	0	0	0	639-658	649.66	4.80	0	0	0	642-661	650.33	4.80	963-975	969.78	3.03	957-968	962.11	2.76	0.67
37	14	0	0	0	657-679	669.60	5.25	0	0	0	652-669	660.10	4.01	998-1012	1007.40	3.53	981-995	987.20	3.33	0.67
40	12	0	0	0	758-771	766.50	3.24	0	0	0	748-771	759.90	5.43	1176-1191	1184.70	3.59	1168-1185	1176.10	4.01	0.65
44	1	0	0	0	897	890.00	0	0	0	0	876	876.00	0	1355	1355.00	0	1340	1340.00	0	0.65
44	6	0	0	0	897-915	904.00	5.90	0	0	0	868-888	878.67	6.35	1369-1397	1383.05	8.85	1368-1382	1375.67	4.72	0.65
46	4	0	0	0	1041-1052	1046.25	4.50	0	0	0	1002-1022	1011.00	8.25	1573-1590	1580.75	6.99	1557-1576	1566.75	7.76	0.65

TABLE S6

**THE NUMBER OF GONOMERES, LENGTH OF THE UNDIFFERENTIATED GONADS, TESTES, OVARIES  
AND MESONEPHROI IN RANA DALMATINA TADPOLES**

Gosner Stage	N	Left Gonad						Right Gonad						Left Mesonephros			Right Mesonephros			G/M Length Ratio
		No of Gonomeres			Gonad Length (µm)			No of Gonomeres			Gonad Length (µm)			Length (µm)			Length (µm)			
		Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	
26	3	0	0	0	376-385	380.33	4.51	0	0	0	372-383	377.67	5.51	582-589	585.33	3.51	576-583	579.67	3.51	0.65
30	2	0	0	0	487-493	490.00	4.24	0	0	0	482-487	484.50	3.54	813-819	816.00	4.24	794-807	800.50	9.19	0.60
33	3	0	0	0	582-594	587.33	6.11	0	0	0	565-574	569.67	4.51	1054-1073	1064.25	7.80	1047-1058	1053.75	4.72	0.55
34	4	0	0	0	587-612	599.75	10.21	0	0	0	583-612	597.25	11.84	1076-1104	1091.75	11.62	1065-1093	1081.00	11.66	0.55
37	1	0	0	0	715	715.00	0	0	0	0	711	711.00	0	1300	1300.00	0	1287	1287.00	0	0.55
40	1	0	0	0	790	790.00	0	0	0	0	786	786.00	0	1436	1436.00	0	1419	1419.00	0	0.55
44	2	0	0	0	841-865	853.00	16.97	0	0	0	819-838	828.50	13.44	1526-1554	1540.00	19.80	1509-1538	1523.50	20.51	0.55

TABLE S7

**THE NUMBER OF GONOMERES, LENGTH OF THE UNDIFFERENTIATED GONADS, TESTES, OVARIES  
AND MESONEPHROI IN RANA ARVALIS TADPOLES**

Gosner Stage	N	Left Gonad						Right Gonad						Left Mesonephros			Right Mesonephros			G/M Length Ratio
		No of Gonomeres			Gonad Length (μm)			No of Gonomeres			Gonad Length (μm)			Length (μm)			Length (μm)			
		Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	
26	10	0	0	0	315-328	320.10	3.21	0	0	0	315-323	318.20	1.93	636-649	642.10	3.07	629-638	634.70	2.21	0.50
30	7	0	0	0	373-388	380.71	4.42	0	0	0	365-379	374.14	4.30	754-769	760.43	4.39	749-758	753.14	2.61	0.50
33	3	0	0	0	445-458	451.00	6.56	0	0	0	438-450	443.67	6.03	987-1006	997.67	9.71	982-1002	991.33	10.07	0.45
34	10	0	0	0	508-521	514.90	3.07	0	0	0	497-512	504.90	3.54	1120-1152	1137.70	8.10	1108-1143	1121.10	8.57	0.45
37	4	0	0	0	582-595	589.25	5.38	0	0	0	574-587	580.75	5.32	1456-1488	1473.50	13.18	1446-1478	1465.00	13.52	0.40
40	5	0	0	0	652-663	657.80	3.90	0	0	0	642-661	652.40	6.77	1617-1645	1631.00	9.90	1608-1642	1624.40	12.03	0.40
44	5	0	0	0	695-721	710.50	8.87	0	0	0	687-712	702.80	9.34	1755-1786	1765.20	14.50	1755-1775	1761.80	9.55	0.40
46	8	0	0	0	738-765	751.88	7.22	0	0	0	730-759	744.88	7.75	1861-1893	1876.25	8.56	1834-1895	1858.88	16.67	0.40

TABLE S8

**THE NUMBER OF GONOMERES, LENGTH OF THE UNDIFFERENTIATED GONADS, TESTES, OVARIES  
AND MESONEPHROI IN RANA TEMPORARIA TADPOLES**

Gosner Stage	N	Left Gonad						Right Gonad						Left Mesonephros			Right Mesonephros			G/M Length Ratio
		No of Gonomeres			Gonad Length (μm)			No of Gonomeres			Gonad Length (μm)			Length (μm)			Length (μm)			
		Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	
26	15	0	0	0	318-332	325.00	3.30	0	0	0	318-330	323.30	3.65	582-599	590.10	4.01	576-597	588.40	5.17	0.55
30	7	0	0	0	386-398	391.86	3.48	0	0	0	368-387	379.14	5.61	705-722	712.14	5.05	702-718	710.43	4.69	0.55
33	3	0	0	0	458-470	464.00	6.00	0	0	0	448-462	454.33	7.09	925-937	930.67	6.03	922-928	925.00	3.00	0.50
34	3	0	0	0	516-527	521.00	5.57	0	0	0	511-523	517.33	6.03	1028-1049	1039.00	10.54	1018-1034	1026.67	8.08	0.50
40	6	0	0	0	675-692	685.17	5.53	0	0	0	674-688	680.33	4.46	1413-1442	1429.17	9.26	1387-1415	1401.83	8.95	0.48
44	9	0	0	0	682-708	696,67	6.69	0	0	0	674-698	684,67	6.26	1435-1478	1451.44	11.13	1387-1427	1409.33	11.08	0.48
46	7	0	0	0	694-718	708.86	7.20	0	0	0	688-712	703.43	7.98	1468-1496	1480.57	8.14	1443-1468	1455.86	7.22	0.48