Counts # 2

E-14

Roll #

Frame

30

dead alive

Extenders used	Results versus eggyolk
bovine amniotic fluid + 1.5% egg albumen	good
0% egg white, 10% egg albumen	same or better
[illegible]	poor - fair
[illegible]	very poor
lactate for el-	poor

Run # 6/2 Extender

orig. motility = 60 15 min in bath

-160 = 2 %
-80 = 13 %
-50 = 16 %
-23 = 5 %

6/5 original 55 %

-160 = 3 %
-80 = 20 %
-50 = 25 %
-23 = 7 %

30 min in bath

cat. 21 %
cit 15 %

- 6/8 orig. 57 %

motility after thawing

Immediate	5 min	30 min	2 hr
15 %	18 %	15 %	17 10 %

orig = 25 % motility

-160	8
-80	52
-21	20

Eyleen

Frame Roll # 63-35

					Total	
30 1	Live	30	Dead	91	121	25%
31 2	"	25	"	89	114	22%
32 3	"	16	"	90	106	15%
33 4	"	19	"	118	137	14%
34 5	"	23	"	114	137	17%
35 6	"	6	"	109	115	5%
36 7	"	25	"	106	131	19%
37 8	"	10	"	103	113	9%
38 9	"	13	"	94	107	12%
39 10	"	13	"	118	131	10%
40 11	unexposed					
41 12	"	23	"	104	127	18%
42 13	"	22	"	123	145	15%
43 14	"	17	"	157	174	10%
44 15	"	29	"	115	144	20%
1 16	"	19	"	120	139	14%
2 17	"	9	"	120	129	7%
3 18	"	13	"	114	127	10%
4 19	"	12	"	105	117	10%
5 20	"	6	"	112	118	5%
6 21	"	12	"	77	89	13.5%
7 22	"	7	"	83	91	7.7
8 23	"	9	"	155	164	8%
9 24	"	12	"	140	152	8%
10 25	"	10	"	118	128	8%
11 26	"	9	"	105	114	8%
12 27	"	19	"	102	121	16%

Frame - Roll # 63 - 35

13	28	Live	7	three alive highly motile	Dead	83	90	8%
14	29		6			85	91	7%
15	30		4			59	63	6%
16	31		3	highly motile		79	82	4%
17	32		12	highly motile		89	101	12%

Frame Roll # 62 - 34

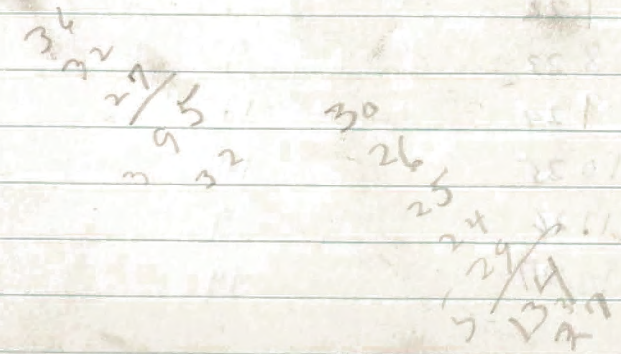
45

av = 3%

44	34	24	42	66	36%
43	33	28	59	87	32%
42	32	19	52	71	27%
41	31	27	64	91	30%
40	30	28	80	108	26%

37	27	27	83	110	25%
38	28	25	80	105	24%
39	29	30	74	104	29%

av = 27%



5 54 5 9

ROLL #62-34

FRAME		LIVE	DEAD	TOTAL	%
10	1	135	106	241	56%
11	2	102	108	210	49%
12	3	83	85	168	49%
13	4	72	97	169	43%
14	5	101	66	167	60%
15	6	234	209	443	53%
16	7	10	147	157	6%
17	8	11	103	114	10%
18	9	10	108	118	8%
19	10	9	103	112	8%
20	11	8	101	109	7%
21	12	13	146	159	8%
22	13	24	180	204	12
23	14	20	212	232	9
24	15	26	181	207	12.5
25	16	29	204	233	12.4
26	17	4	96	100	4
27	18	7	82	89	8.5
28	19	6	99	105	5.7
29	20	9	118	127	7
30	21	2	149	151	1.3
31	22	6	178	184	3%
32	23	5	191	196	2.5
33	24	6	302	308	2%
34	25	5	147	152	3.3
35	26	11	211	222	5

62-34 from 27 → 38

Control of $\overline{\delta / 9}$ in gly $\bar{S} = 29.3$ μ/sec

− 23	22 %	~~23~~18	29μ
− 80	51 %	48.55	31μ
− 160	8 %	5.~~9~~	30μ
control	25 %		29μ

cooled 25° → t°
7° → 7°C
little difference
for −80 48% 25 → 8° 1°/min then chilled

51

Repeat exp.

E

Roll 66-38

Frame	alive	% Rec.	dead	total	%		τ
11	49	50	452	501	9.9	950	32 μ/sec
12	34	50	335	369	10.0	150	28 μ/sec
13	38	50	346	384	9.9	445	32.8 μ/sec
14	36	55	288	324	11.1	555	32.8
15	7						
16							
17							
18							
19							
20							

-80; 10.2; 31.7

31.4 ± 2% μ/sec

		% sec.			%		
21	6	8.2	359	365	1.64	8.20 5	30.8
22	8	9.2	428	436	1.84	5	27.6 μ/sec
23	6	6.3	471	477	1.26	5	28.6
24	10	8.3	504	514	1.95	5	32.8
25	5	5.	500	505	1.00	5	28.6
26	14	23	294	308	4.55		28.6
27	14	21	330	344	4.25		27.9
28	11	18	300	311	3.54	1770	26.4
29	13	21	310	323	4.20		32.7
30	20	23	~~468~~	430	4.65	2325	31.4

21–25: -16; 1.54; 29.7
26–30: -23; 4.30; 29.4

10.5 cm = 4/
=.20

1 cm = .0191 m
= 19.1 μ

19.1 μ × 1.29 = 246

4.0		
5.5	2.5	
4.9	4.4	
2.8	2.3	
3.9	5.5	
5.5	2.9	3.88 / 3 sec
2.0	3.5	1.29 / sec
2.5	2.5	
3.1	3.4	
3.2	6.0	
2.2	3.0	
4.0	3.3	
3.7	3.6	
4.0	2.5	
4.7	3.0	
3.0	5.4	
4.2	3.5	
2.0	6.0	
3.3	5.4	
2.2	3.6	
70.7	1.7	
	2.3	
	6.0	

1.18
353
20) 70.7
60
107

388
22) 853
66
193
176
100

Roll 64-31

Fram	alive	dead	total	%		μ/sec Motility
22	64	121	185	36% **		52.9*
23	73	98	171	43 %		~~29.0 μ~~
24				38%		
25						
26	50	89	139	36		29.0 μ
27						
28	38	135	173	22%	obs 58%	26.2 μ/sec
29	30	148	178	17%	44.5 %	27.2 μ/sec
30	27	147	174	15.5	40 %	19.5* ?
31	23	145	168	13.7	36 %	20.2† ?
32	18	163	181	9.95	26.2%	25.2
						28 μ/sec if last three = 2 sec
						av = 23.7 = 24 μ/sec
33	egg yolk interferes					
34						
35						
36	12	117	139	8.65	23 %	
37	9	112	121	7.4	20 %	
38	Field blurred debris!					hard to see
39	8	126	134	6.35	17 %	
40	7	183	190	3.70	9.7	
41	25	153	178	14%	37 %	24.6 μ
42	23	126	149	15%	41 %	22.7 μ

† probably exp = 2 sec

* 1 sec too small exp

** overestimated dead ones "headless variety"

all oval particle about size of heads
<u>counted</u> <u>as</u> <u>dead</u> <u>spore</u>

Roll 67-39

	Frame	Alive	Dead	total	%	% R.	Motility
1	5	not cld	(½ exposed)				
2	6	119	143	262	45%		24 μ/sec
3	7	121	126	247	49%		24 μ/sec
4	8	123	137	260	47%		24.3 μ/sec
5	9	~~13~~					
6	10						
7	11	25	208	233	10.8	23%	19 μ/sec
8	12	32	248	280	11.4	24%	20 μ/sec
9	13	25	270	295	8.5	18%	20.7 μ/sec
10	14	30	232	262	11.4	24%	22 μ sec⁻¹
11	15	32	254	286	11.2	24%	23.7 μ
12	16	26					21.2 μ
17							
13	17	11	332	343	3.2	6.8%	22.4
14	18	12	346	358	3.36	7.2%	21.6
15	19	9	354	363	2.48	5.3%	22 μ/sec
16	20	10	327	337	2.97	6.3%	22.6
17	21	9	---	---	---	---	---
18	22	13	312	325	4.00	8.5%	20.5
19	23	13	307	320	4.07	8.65%	21.6
20	24	14	307	321	4.37	9.3%	19.7
21	25	3!	200-300		1.5%	3.0	---
22	26	9	300		3.0%	6.0%	
23	27	27	316	343	7.89	16.8%	21.4
24	28	30	398	428	7.02	14.9%	19.7
25	29	41	383	424	9.68	20.6%	22.2
26	30	30	328	358	8.39	17.8%	20 μ/sec
27	31	unexposed					

20.8
4 | 83.3

thaw 22°C

chilled 5°C

		25°C
-160	7.1 %	6.4 %
-80	17.6 %	22.6 %
-50	22.2 %	25 %
-22	12.7 %	14.6 %

thawed at 37°C

-160	8.1 %	8	7	7
-80	22?	22	17.2 %	17
-50	23.1	23	22.6	23
-23	12.7	13	9?	10

Roll 67-39

28 32

	Alive	Dead	Total	% abs	% Rec.	Speed
28-32	22	338	360	6.13	13%	19.9 m/sec
29-33	28	390	418	6.71	14.3%	21.8
30-33	33	400	433	7.6	14.6 16.2%	417
31 34	19	319	338	5.96	12.7	20.85
32 35	26	302	328	7.92	16.8	

68-40

		Alive	Dead	Total	% abs	% Rec.
1	10	32	301	333	9.60	20.4%
2	11	38	299	337	11.3	24.0%
3	12	36	310	346	10.42	22.1%
4	13	41	285	326	12.6	26.8%
5	14	24	270	294	8.17	17.4
6	15	31	---	---		
7	16	22	397	419	5.25	11.2
8	17	22	419	441	5.0	10.6
9	18	29	360	389	7.45	15.8
10	19	23	344	367	6.28	13.4
11	20	24	385	409	5.9	12.5
12	21	not did				
13	22	36	357	393	9.15	19.5
14	23	62	374	436	14.2	30.2
15	24	38	327	365	10.4	22.2
16	25	37	347	384	9.65	20.5
17	26	42	348	390	10.8	22.9

Bracket annotations: 22.6 (rows 1–5, % Rec.); 12.7 (rows 7–11); 23.1% (rows 13–17)

3 ⟌ 115.3

23.1

Strome 68-40

Strome	alive	dead	total	% abs	% orig	speed
18-27	12	322	334	3.6	7.7	
19 28	13	369	382	3.42	7.25	
20 29	14	398	412	3.41	7.25	
21 30	19	297	316	6.02	12.8	
22 31	unopposed					
23 32	10	331	341	293	6.25	
24 33	11	net				
25 34	23	329	352	6.54	13.9 %	
26 35	28	307	335	8.39	17.8 %	
27 36	35	308	342	10.5	21.8 %	
28 37	23	277	300	7.66	16.3	
29 38	26	318	344	7.55	16.1	
30 39	29	303	332			
31 40	22	298	320			
32 41	16	266	282	6%	12.7	
33 42	14	224	238			
34 43	12					
35 44	16					
36 45	18					

Roll 69-41

Frame	Alive	Dead	total	alv %	% orig	Speed
1 17	24	224	248	9.7	20.6	
2-18	32	325	357	8.9	19.2	
3-19	37	274	311	11.9	25.4	
4-20	36	224	262	13.7	29.2	
5-21	25	264	289	8.65	18.4	
6-22	28	---	--	-	"	
7-23	10	314	324			
7-24	16	335	351			
8-25	19					

22.[illegible]

Roll 70-42

frame #	alive	dead	total	%	Speed
1 11	100	67	167	60%	
2 (12)	76	67			
3 (13)	86	90			
4 (14)	85	73			
5 15	96	81			
6 16	102	55			
7 17	110	59			
	unexposed				
9 19	6	240			
10 20	4	193			
11 21	3	172			
12 22	3	179			
13 23	0	not all			
14 24	2	"			
15 25	7	226			
16 26	6	141			
17 27	7	143			
18 28	10	138			
19 29	19	106			
20 (30)	9	130			
21 (31)	13	96			
22 (32)	7	111			
23 (33)	11	109			
24 (34)	10	124			
25 (35)	13	112			
26 (36)	12	113			
27 (37-38)	15 (drift)				
28 (38-39)	27	174			
29 (39-40)	24	139			

Frame #	Alive	Dead	Total	%	Speed
30 (41)	26	160			
31 (42	21	155			

Roll 71-43

Frame	alive	dead	total	ale %	% survival
1-5	50	47		52 %	
2-6	41	48		46 %	
3-7	39	48		44 %	
4-8	43	52		45 %	
5-9	33	66		33 %	
6-10	31	80			