

	A	B	C	D		A	B	C	D	
1	1	1	1	2		1c	2c	3c	4c	CONTROL SERA (non-immune)
2	2	2	2	3		5c	6c	7c	8c	
3	3	3	3	3		9c	10c	11c	12c	
4	4	4	4	4		12c(b)	13c	14c	15c	
5	5	5	5	5	ANTI-WG SERA	Ic	IIc	IIIc	SIc	
6	5	5	5	5	1-3 = $\frac{WG}{3}$	S2c	S3c	S4c	S5c	
7	5	5	5	5	4-6 = 4	S6c	S7c	S8c	S9c	
8	5	5	5	6	7 = 16	S10c	P1c	P2c		
9	6	6	6	6	8 = 24					
10	6	7	7	7	9 = 2					
11	7	8	8	8	10 = 26	1P	2P	3P	4P	POOLED + HEMOLYSED SERA (COLI)
12	8	8	9	9	11 = 15	5P	6P	8P	9P	
13	9	9	9	10	12 = 19	9P	10P	11P	12P	
14	10	10	10	10	13 = 11					
15	11	11	11	11	14 = 1					
16	12	12	12	12	15 = 5					
17	12	12	13	13		I				
18	13	13	13	14			S1P	S2P	S2	
19	14	14	14	15		S2	S2	S3P	S4P	
20	15	P1	P1	P1	ANTI-PHAGE SERA	S4	S4	S4	S5P	
21	P1	P1	P1	P1	P1 = $\lambda_2$	S5	S5	S5	S6P	
22	P1	P1	P1	P1		S6	S6	S6	S7	
23			C	C		S7	S7	S7	S7	
24	C	C	C	C	RABBIT COMPONENT	S8	S8	S9	S10	
25	C	C	C	C		S10	S10	S10	S16	

ANTISERA IN STORAGE

Dark entries = 5-10 cc quantities  
Pencil entries = 1-2 cc "

Prefixes: P = phage  
S = Salmonella  
none = coli

Suffixes: c = control  
P = Pooled trial  
bleeding

Titers

S7 =  $\frac{1}{2560}$  (slide aggl.)  
S10 =  $\frac{1}{320}$  ( " )  
S1-6 =  $> \frac{1}{20,480}$ .

GENETICS  
FREEZER  
(LOWER LEFT CORNER)

STOCK PAULION  
FREEZER  
(NEAR RIGHT)

2/2 - 2/13/53

E. coli typing via Kauffmann-Ewing

SEROTYPE

Agglut. tests.

K12	SEROTYPE			Agglut. tests.			
	H*	O	K	H	O	K	
wy 1	+	-	-	wy 41	rod (G)	077	3!
11	-	-	X	42			
12				43	+4	OK	
13	FG pool			44	26 (21?)		
14			K119?	45	+	077	
15	+1, 12			46	+7?	076	+
16	AC pool			47	+13		3(23)
17				48	(F) pool	081	X
18				49			
19	H		K19?	50			
20	+7			3	-	08	+
21	MC pool			4	-	group C (NK)	
22			X	B	-	-	-
23	+						
24	+9						
25							
26	+1						
27							
28							
29	FG pool						
30	+27						
31							
32							
33	+4?	021	5, 9, 29 K 28				
34							
35	(E) pool						
36		09	55, 9, 26, 32				
37	+26(14)	04, 18	K3				
38							
39	+	04 (18)	K12	15	15		
40	+	07					

Legend  
 H+ swarm but not agglut.  
 X tried but neg.  
 \* firm swarms at 37°  
 ( ) slight, secondary agglut  
 during test

H	O	K
2	17	
3	8	
4	25	
5	-	
6	-	
7	2	
8	-	
9	12	
10	R	

no aggl. titers determined

33 H types  
 124 O known  
 60 K known



φ = possible phage lysate

# SRP tests of KK cultures

= Ewing's Kserotypes ✓  
of EML505

Each tested against W1177(F-) and W1817(F+) on EMS mal.  
+ φ - refer to mal reaction

KK #	First trial	Second trial	Comment
1	no SRPs (0)		
2	no SRPs (0)		
3	1 mal- $\bar{c}$ 1817	0	
4	no SRPs (0)		
5	no SRPs; confluent mal + on control plate		
6	no SRPs; 4 + on control plate		
7	0		
8	$\bar{c}$ 1817, ca 150 protos, + + - Many mal + on control, 0 $\bar{c}$ 1177	$\bar{c}$ 1817 ca 200, + + -	Appears to be fertile, F-
9	0		
10	ca 100 col, + + -, on control + $\bar{c}$ 1177; 1 + $\bar{c}$ 1817	$\bar{c}$ 1817, 1 -	
11	4 + $\bar{c}$ 1817	$\bar{c}$ 1817, 1 -	
12	0		
13	0		
14	0		
15	Control 1 +; 1177 0; 1817 10 +, 8 -	control 1 +, 1 - 1177 0 1817 2 +, 2 -	
16	+ + - on all plates	ca 20-30 col, +, -, on all plates	KK culture found to be mixed $\bar{c}$ respect to mal
17	$\bar{c}$ 1817, ca 60 col, +, -, v		
18	$\bar{c}$ 1817, 1 +, 1 -	$\bar{c}$ 1817, 2 +	
19	$\bar{c}$ 1817, ca 100, + + - φ		Appears to be fertile, F-
20	$\bar{c}$ 1817, 3 +, 6 -	0	
21	0		
22	$\bar{c}$ 1817, 1 +, 16 -, 1 v		
23	0		
24	0		
25	control, 1 col 1817, 12 v(?)	0	
26	control, 1 - (?) 1817, ca 250, +, -, v. φ	1817 ca 200, +, -, v φ	Appears to be fertile, F-

# SRP tests of KK cultures

KK #	First trial	Second trial	Comment
27	control 1+ 1817 ca 600, +, -, v	φ	Appears to be fertile, F-
28	1817 1-	1177 1+ 1817 ca 200, all mal -	?
29	0		
30	0		
31	1817 ca 100, +, -, v	φ	Appears to be fertile, F-
32	0		
33	1817 ca 50, + & -		Appears to be fertile, F-
34	0		
35	1817 11 slow gummy, φ ca 200 -		Appears to be fertile, F-
36	1817 ca 500, + & -		Appears to be fertile, F-
37	1817 1+	1817 1+	
38	1817 ca 150, + & -	φ	Appears to be fertile, F-
39	1817 ca 1000, + & -	φ	Appears to be fertile, F-
40	1817 ca 50, + & -		Appears to be fertile, F-
41	control 2+		
42	0		
43	Control, smear, + & - 1177 11+ 1817 ca 150, + & -	φ	Control: several very small - 1177: 3 mal + or v 1817 ca 200, +, -, v
44	0		
45	0		
46	0		
47	0		
48	1817, 2+, 7-		
49	1817 2+	0	
50	1817 1+	0	
51	0		
52	1817 1+, 1-	0	

SAP tests of KK cultures

KK#	First trial	Second trial	Comment
53	0		
54	1817, ca 200, ++ - control 1 -	control 1 + n sl 1177 0 1817 ca 100 -	Appears to be fertile; F - Probably fertile
55	1817 6+, 4-		
56	1177 6+ 1817 12+	0	
57	1817 ca 200+, 10 -		Appears to be fertile; F -
58	Control 200 +		
59	1817 1 -	0	
60	0		

			Suc	Mal	x 1177	x 1490	x 1802	
119a	= 1051	unstable lac+	-	-	✓			wg 24
**	115	1048	-	-	0			
	112	1045	-	+	0			
	124	= 1053	<del>also lac unstable</del>	+	0	✓		
			lac ± unstable	cells				
129d	1056		-	+	✓	✓		wg 25
131a	1057		+	+	0	(1+) 2+1-	?	
170c	1081		±?	+	✓	✓		wg 26
	1074		+	+		1-2		
	1080		±?	+		1+?		

1063 (143a) Same as 055: B5-type

What serological properties on the most types?

1052 121e - (143a) <sup>1063</sup> inconsistent reaction: Same for rest of lac unstable?  
Mal - "rough"

- 127a
- 135b
- 145a
- 151b

Clifton

FMS mel SM

	loc	cl	mal	SM	See	CK	λ			
1277	K 52	+	-	+	S	±	-	R		
1278	K 61	-	-	-	S	-	-	R		
1279	K 63	+	-	+	S	-	±	R		
1280	K 88	+	-	+	S	-	+	R		
1281	K 93	+	-	+	S	+9	-	R	2, >100+	✓ all+
1282	K 99	+	-	+	S	+8	-	R	2+	W-1764 (Psychosis isol. 1929)
1283	K 108	+	-	+	S	-	?	R		
1284	K 120	+	-	+	S	+8	±	R		
1285	K 122	+	-	+	S	+9	-	R		
1286	K 130	+	-	+	S	-	-	R	5- (?) ✓	W-1762
1287	K 131	+8	+	+	S	+8	-	R	✓	(psychosis, isol. 1929)
1288	K 133	+	-	+	S	-	±	R		Wg 30
1289	K 135	+	-	+	S	-	-	R		
1290	K 137	+8	+	+	S	+9	-	R		
1291	K 142	+	-	+	S	-	±	R		
1292	K 144	+	-	+	S	-	-	R		
1293	K 153	+	-	+	S	-	-	R	2+	
1294	K 175	+	-	+	S	+ <del>8</del>	-	R	3+	
1295	K 197	+	-	+	S	-	±	R	1+	
1296	K 201	+	-	+	S	-	-	R	2+, 15-	several -- ✓ <del>fertile?</del> (Schwarzmann) W176

later, W 1763 x 1817 → 14+, several hundred - x W 1817

W1762 ✓ loc-Mal- SRP recovered in checks  
 W1763 No yield in 1st checks 1-7-52 | 12+, no-  
 W1764 excess + (Control?) 1-7-52 | nothing

1296, 1281

~~rechecked~~

W1763 on rechecks - control, approx. equal no. mal + on cross + control. No -  
 W1764 on rechecks - ca 500 mal + on control, confluent growth on cross.



Miller - U. of Chi. 11-30-51

	loc	dr	ovc	ck	mel	SM	all AR E MS mel SM		
1297	1	⊕, al+	-	-	+	+	S		
1298	2	+	-	-	+	+	S		
1299	3	+	-	-	+	+	S		
1300	4	+	-	-	+	+8	S		
1301	5	+	-	-	+	+	S	1+, 1-	Wg 44
1302	6	+	-	-	+	+8	S		
1303	7	+	-	-	+	+	S		
1304	8	+	-	-	+	+	S		
1305	9	+	-	-	+	+		4+, 2-(?)	
1306	10	+	-	-	+	+		2+, 2 al 3-9-52	cross & control gave = no SRP
1307	11	+	-	-	+	+	S		
1308	12	+	-	-	+	+	S		
1309	13	+	-	-	+	+	S		
1310	14	+	-	-	+	+	S		
1311	15	+	-	-	+	+	S		
1312	16	+	-	-	+	+	S		
1313	17	+	-	-	+	+	S		Wg 45 (fertile = W1817)
1314	18	+	-	-	+	+	S		
1315	19	+	-	-	+	+	S		
1316	20	+	-	-	+	+	S		
1317	21	+	-	-	+	+	S		
1318	22	+	-	-	+	+	S		
1319	23	+	-	-	+	+	S		
1320	24	+	-	-	+	+	S	21+, 1-	
1321	25	+	-	-	+	+	S	1+	
1322	26	+	-	-	+	+	S		
1323	27	+	-	-	+	+	S		
1324	28	+	-	-	+	+	S		
1325	29	+	-	-	+	+	S		
1326	30	+	-	-	+	+	S		
1327	31	+	-	-	+	+	S		
1328	32	+	-	-	+	+	S	plate crowded, - and al+	nothing on second or third trials (11-7-52, 3-7-52)
1329	33	+	-	-	+	+	S		
1330	34	⊕, al+	-	-	+	+	S		
1331	35	+	-	-	+	+	S		
1332	36	+	-	-	+	+	S		
1333	37	+	-	-	+	+	S		
1334	38	+	-	-	+	+	S		
1335	39	+	-	-	+	+	S		
1336	40	+	-	-	+	+	S		
1337	41	+	-	-	+8	+8	S	1 al	
1338	42	+	-	-	+	+	S		
1339	43	+	-	-	+	+	S		
1340	45	al+	+	-	+	+	S		
1341	46	al+	+	-	+	+	S		
1342	47	al+	+	-	+	+	S		
1343	48	al+	+	-	+	+	S		
1344	49	al+	+	-	+	+	S		
1345	50	al+	+	-	+	+	S		
1346	51	al+	+	-	+	+	S		
1347	52	al+	+	-	+	+	S		

Miller, U. of Chi.

11-30-51

		<u>loc</u>	<u>cl</u>	<u>acc</u>	<u>ck</u>	<u>mal</u>	<u>SM</u>	<u>FMS</u>	<u>mal SM</u>
1348	53	el +	+	-	-	+	S		
1349	54	el +	+	-	-	+	S		
1350	55	el +	+	-	-	+	S		
1351	56	el +	+	-	-	+	S		
1352	57	el +	+	-	-	+	S		
1353	58	el +	+	-	-	+	S		
1354	59	el +	+	-	-	+	S		
1355	60	el +	+	-	-	+	S		
1356	61	el +	+	-	-	+	S		
1357	62	el +	+	-	-	+	S		
1358	63	el +	+	-	-	+	S		
1359	64	el +	+	-	-	+	S		
1360	65	el +	+	-	-	+	S		
1361	66	+	+	-	-	+	S		
1362	67	el +	+	-	-	+	S		
1363	68	el +	+	-	-	+	S		
1364	69	el +	+	-	-	+	S		
1365	70	el +	+	-	-	+	S		
1366	71	el +	+	-	-	+	S		
1367	72	el +	+	-	-	+	S		
1368	73	el +	+	-	-	+	S		
1369	74	el +	+	-	-	+	S		
1370	75	+	+	-	-	+	S		
1371	76	+	-	-	-	+	S		
1372	77	+	-	-	-	+	S		
1373	78	+	-	-	-	+	S		
1374	79	+	-	-	-	+	S		
1375	80	el +	+	-	-	+	S		
1376	81	el +	+	-	-	+	S		
1377	82	el +	+	-	-	+	S		
1378	83	el +	+	-	-	+	S		
1379	84	el +	+	-	-	+	S		
1380	85	el +	+	-	-	+	S		
1381	86	el +	+	-	-	+	S		
1382	87	el +	+	-	-	+	S		

0

little or no ground

1396

Benham, Chicago

12-4-51

		loc	cl	ovc	CK	mal	SM	EMS mal SM
1383	P-2826	+	-	+8	-	-	S	
1384	97466	+	-	±8	-	-	S	
1385	P-103312	+	-	-	+	+	S	
1386	P-315797	+	-	-	+	+	S	
1387	P-349584	+	-	±8	+	+	S	
1388	P-395659	+	-	±8	+	+	P	
1389	409468 U	+	-	+	+	+	S	
1390	P-430208	+	-	-	+	+	S	
1391	P-444266	+	-	-	+	+	S	
1392	P-448851	+	-	-	+	+	S	
1393	P-484064	+	-	-	-	+	S	
1394	P-497502 (2)	±	-	±8	-	±8	R	
1395	P-497502	+	-	±8	+	±8	R	
1396	P-524147	+	-	+	+	+	S	1+
1397	P-528421	±	+	±8	-	+	S	
1398	P-534103	+	-	-	+	+	S	150 Fertile, F- Wg 47
1399	P-536140	+	-	+	+	+	S	
1400	P-536484	+	-	+	+	+	S	
1401	P-537830 U	+	-	-	-	+	S	
1402	537880 U	+	-	±8	+	+	S	
1403	P-538022	+	-	±8	+	+	S	
1404	538031 U	+	-	-	-	+	S	
1405	P-538241	+	-	-	±	+	S	
1406	P-538268	+	-	-	±	+	S	
1407	593345 wound	+	-	-	+	+	S	fertile F+ Wg 49
1408	P-539686	-	-	-	+	+	S	
1409	Kruze throat	+	-	-	±	+	S	1+
1410	loc al from 1297	al	+	-	-	+	S	
1411	loc al from 1330	al	-	-	-	-	S	

3+, 11- can't confirm

150 Fertile, F- Wg 47

fertile F+ Wg 49

Benham, Chicago

12-6-51

1412	18411	+8	+	+8	+	+	S	
1413	P-21664	+	-	-	+	+	S	several hundred, +4-
1414	P-102836	+	-	-	+	+	S	several hundred, +3-
1415	P-440680	+	-	-	+	+	S	fertile F+; Wg 48
1416	454575 abdom. fluid	+8 (1-)	-	±8	+	+	S	ca 100; 2+ 64+, 95 W G 34
1417	P-503202	+	-	-	+	+	S	
1418	P-534617	+8	+	±8	-	+	R	
1419	535633 peritoneum	+	+	-	+	+	R	
1420	536603	+	+	+	+	+	S	
1421	P-537686	+	-	-	+	+	S	ca 250, +, +3, -
1422	P-537856	+	-	-	+	+	S	check purity of parent
1423	538263	+	-	-	+	+	S	1+
1424	loc from 1416	-	-	±8	+	+	S	OK

check purity of parent  
OK

See opp. page

Catlin - Marquette

		loc	cello	Suc	ck	mel	SM	SRP		
1425	27c	+ <sup>g</sup>	+	+ <sup>g</sup>	-	+	P			
1426	35b	+	-	+ <sup>g</sup>	-	+	S			
1427	38b	+	-	+ <sup>g</sup>	-	+	P			
1428	38c	+	-	+ <sup>g</sup>	-	+	P			
1429	38d	+	-	+ <sup>g</sup>	-	+	P			
1430	46f	+	-	+	-	+	S	1+, 1- (?)		
1431	51d	+	-	-	+	+	R			
1432	55b	+ <sup>g</sup>	+	+ <sup>g</sup>	-	+	S			
1433	55c	-	+	± <sup>g</sup>	-	+ <sup>g</sup>	R			
1434	57d	+	-	-	+	+	S			
1435	58d	+	-	+ <sup>g</sup>	-	+	S	aka lutea lutea		
1436	58e	+	-	± <sup>g</sup>	+	+	S	2+		
1437	58f	+	-	± <sup>g</sup>	-	+	S			
1438	59f	+	-	+	-	- little g.	S			
1439	66b	+	+	+	-	+	S			
1440	66c	+	+	+	-	+	S			
1441	66d	+	-	+	-	+	S			
1442	66e	+	+	+	-	+	S	1+		
1443	66f	+	+	+	-	+	S			
1444	69b	+	-	-	±	+	S			
1445	84d	+	-	+	-	+	P			
1446	84b	+	-	+	-	+	P			
1447	84d	+	-	+	-	+	R			
1448	84f	+	-	+	-	+	R			
1449	85d	+	+	+	-	+	S	ca 100 col, all mal +		
1450	85c	+	+	+	-	+	S			
1451	85d	+	+	+	-	+	S			
1452	85a	+	+	+	-	+	S			
1453	86b	+	-	-	+	mixed?	S			
1454	86e	+	-	-	+	mixed?	S			
1455	89b	+	-	+	±	+	S			
1456	89d	+	-	+	±	+	S			
1457	89f	+	-	+	±	+	S			
1458	90b	+	-	+	+	+	S			
1459	90f	+	-	+	+	+	S	9+		
1460	91c	+	-	-	+	+	S			
1461	91d	+	-	-	+	+	S			
1462	91a	+	-	-	+	+	S	4+		
1463	91f	+	-	-	+	+	S	15+		
1464	94b	+	-	+	-	+	S			
1465	94c	al	+	+	-	+	R			
1466	94d	al	+	+	-	+	R			
1467	94a	+	-	+	+	+	S			
1468	95b	+	-	-	+	+	S			
1469	95c	+	-	-	+	+	S	ca 50+		
1470	95f	+	-	-	+	+	S	7+		
1471	96b	+	-	-	+	+	S			
1472	96f	+	-	-	+	+	S			
1473	98a	+	-	+	-	+	S			
1474	98b	+	-	+	-	+	S			
1475	98c	+	-	+	-	+	S	plate crowded, all +		
1476	98d	+	-	+	-	+	S	1+		
1477	98e	+	-	±	-	+	R	presumed		
1478	99a	+	-	+	-	+	S	ca 100, + and - (?)		
1479	99a	+	-	+	-	+	S			

Quantifiable form  
large, spreading light-  
colored colonies

1421 - on rechecking  
(3-9-52) got approx equal  
numbers mal + prototrophs on  
cross and control. No mal -.

Cattin - Marquette

		lac	cello	Suc	CK	meat	SM	SRP	
1480	99c	(+)	+	+	±	+	S		
1481	99d	(+), (+)	+	+	±	+	R		
* 1482	99e	(+), (-)??	+	+	±	+	S	13+, 1- (?)	* see opp. page
1483	990b	sl	+	+	-	+	R		
1484	100ccc	sl	+	+	-	+	R		
1485	101d	sl	+	+8	-	+	R		
1486	101e	sl	+	+8	-	+	R		
1487	101f	sl	+	+8	-	+	R		
1488	102b	sl	+	+8	-	+	R		
1489	102d	sl	+	+8	-	+	R		
1490	102e	sl	+	+8	-	+	R		
1491	102g	+	-	-	+	+	S	ca 200+; several - (?)	
1492	103	+	-	-	+	+	S		
1493	103e	+8	+	+8	-	+	R		
1494	105a	+	-	+	-	+	S	15+, also background of small + column	
1495	105b	+	-	+	-	+	S		
1496	105c	+8	+	+	±	+	S		
1497	105d	+	-	+	-	+	S		
1498	105e	(+)+8	-	+	-	+	S	WY (A/P)	
1499	105f	+	-	+	-	+	S		
1500	106b	(+), (+)	+	+	-	+	S		
1501	106c	+8	+	+	-	+	S		
1502	106d	+8	+	+	-	+	S	3+, 2 - (?)	
1503	106e	+8	+	+	±	+	S		
1504	106f	+8	+	+	±	+	S		
1505	107a	+	+	+	-	+	S		
1506	107c	+	-	-	±	+	S	WY	
SL (1507)	107d	+8	-	-	±	+	S	11+, 6-	
1508	107e	+8	-	-	±	-	S	1-	
1509	108b	+	-	+	-	+	S	turbid	
1510	108c	+	-	+	-	-	S		
1511	108d	+	-	+	-	-	S		
1512	108e	+	-	+	-	-	S		
1513	108f	+	-	+	-	-	S	1-	
1514	109b	+	-	-	±	+	S		
1515	109c	+	-	-	-	+	S	15+	
1516	109d	+	-	-	-	+	S	22+	
1517	109e	+	-	-	-	+	S	6+	
1518	110b	+	±	+	-	+	S		
1519	110c	no gr.	-	-	-	-	-		
1520	110d	+	-	+	-	+	S		
1521	110e	+	-	±	+	+	S	4+	
1522	110f	+	-	±	+	+	S		
1523	111a	+	+	±	+	+	S	1+	
1524	111c	(-)	+	±	-	-	R	Though SR, did not grow on Small SM	
1525	111d	(+)	±	±	-	+	P		
1526	111e	-	-	+8	-	+	P	Turbid	
1527	111f	+	-	+	±	+	S	turbid	shows plaques
1528	112b	(+)	-	-	-	-	S	1-	
1529	112c	(+)	-	-	-	-	S	1+, 16-	Replanted to Small SM, 16 lac+, 1 lac-
1530	112d	(+)	-	-	-	-	S	6-	all lac+
1531	112e	(+)	-	-	-	-	S		
1532	112f	+	-	-	-	-	S	5-	
1533	113b	+	-	+	±	+	S	5+	
1534	113c	+	-	+	±	+	S	ca 50+	

Transferred

W1817 used

←

✓

\* One culture short between 1528 and 1537;  
 missing culture provisionally assumed to be 1537 (113f) 776

Catlin - Marquette

		loc	cello	Suc	CK	mal	SM	SRP			
1535	113d	+	-	+ <sup>g</sup>	-	+	S				
1536	113e	+	-	-	-	+	S				
<del>1537</del>	<del>113f</del>										
1538	114d	sl	-	-	-	+	S				
1539	114f	-	-	-	±	+	S				
1540	115c	+	-	-	+	+	S				
1541	115d	+	-	-	-	±g	S				
el 1542	115e	-	-	-	+	+	S	4+, 2-	Recheck in fertilized (6*, 32-)		WG 33
1543	115f	sl	-	-	-	±g	S				
1544	116b	+	-	-	-	±g	S				
1545	116c	+	-	-	-	±g	S	2+ 7-	9hact		
1546	116d	+	-	-	-	+	S	3+			
1547	116e	+	-	-	-	+	S	1+			
1548	116f	+	-	-	-	+	S	7+			
1549	117a	+act	+	+	-	+	S	2+			
1550	117b	+	+	+	-	+	S	1+			
1551	117c	sp <sup>+</sup>	+	+	-	+	S	.			
1552	117f	sp <sup>+</sup>	+	+	-	-	S	## no-			
1553	118b	+	-	-	-	-	S	.			
1554	118c	+	-	-	-	-	S	60-	→ all lac-		
1555	118d	+	-	-	-	-	S	.			
1556	118e	+	-	-	-	-	S	.			
1557	118f	+	-	-	-	-	S	.			
1558	119a	+ (and)	-	-	-	-	S	3 days: 1Hd-			
1559	119c	+ (and)	-	-	-	-	S	1-			
1560	119d	+/-	-	-	-	+	S	60+ 3-	lac- all lac+	on recheck ca 200 cells, control gene cross - sufficient q.	
1561	119e	+/-	-	-	-	+	S	.			
1562	119f	+/-	+	-	-	+	S	ca 80 <sup>+</sup> sp-	5hact m plate on recheck wg 43	control 1 mal + cross 200 mal + see 17/19	
1563	120a	+/-	-	-	-	+	SR				
1564	120b	+/-	-	-	-	+	SR				
1565	120d	+	-	-	-	+	SR				
1566	124c	ng sl	0	-	-	-					
1567	125c	+	-	-	-	+	P	## no-	all lact	Recheck, sufficient q.	cross control
1568	126b	sl	-	-	-	+	S				
1569	127b	ng 18us	+	+	-	+	SM				
1570	127c	+	-	-	-	+	S	## no-	all lact		
1571	127d	+	-	-	-	+	SR	.			
1572	127e	+	-	-	-	+	S	.			
1573	128b	+	-	-	-	+	S	1+			
1574	128d	+	-	-	-	+	S	3 days 3-2+			
1575	129a	+	-	-	-	+	S	## all-	→ all lac-		
1576	129c	+	-	-	-	+	S	.			
1577	129e	+	-	-	-	+	S	18+	18 lact		
1578	129f	+	-	-	-	+	S	3+ 1-	all lact		
1579	130b	sl	+	-	-	+	SR	.			
1580	130c	sp	+	-	-	+	R				
1581	130d	sl	+	-	-	+	RR				
1582	130e	+	+	-	-	+	RS				
1583	131b	+	-	-	-	+	S				
1584	131f	ng.	+	-	-	+	SP				
1585	132b	+ (and)	-	-	-	+	S	0			
1586	132c	+	+	-	-	+	S	2+			
1587	132d	+ (and)	-	-	-	+	S	0			
1588	132e	+ (and)	-	-	-	+	S	0			
1589	133b	m.g.	-	-	-	-					

3 components from 1482 All three cells +

1482 a: lac +, small colonies

1482 b: lac +, large colonies

1482 c: lac +, extremely gummy

1524 pinpoint colonies - may  
be +, but too small to tell.



Catlin - Marquette

		lac	cello	mc	ck	mal	SM	SRP		
1590	133c	-	±	±	-	+	R			
1591	133d	+	+	+	-	+	R			
1592	133a	+ <del>mm</del>	+	+	-	+	R			
1593	133f	-	±	±	-	+	R			
1594	135a	(+) +al	+	+g	-	+g	R			
1595	135c	+	+	+g	-	+g	R			
1596	135d	(+) +al	+	+g	-	+g	R			
1597	135e	(+) +al	+	+g	-	+g	R			
1598	135f	+	+	+g	-	+g	R			
1599	137a	+ <del>mm</del>	+	+g	-	+g	S	0		
1600	138d	+ <del>mm</del>	-	-	-	+	S	1		
1601	139a	+g	+	+g	-	+g	S	1mc		
1602	140b	+	+	-	-	+g	S	0		
1603	140c	+ <del>mm</del>	+	-	±	+g	S	1-	lac+	
1604	140d	+ <del>mm</del>	+	+g	±	+g	S	0		
al (1605)	140e	+ <del>mm</del>	+	±g	±	+g	S	+	/?	Appear lac+ + lac- on replica to S lac SM
1606	140f	+ <del>mm</del>	+	±g	-	+g	S	1-	lac-(?)	low crowded to be seen
1607	140g	+ <del>mm</del>	+	±g	-	+g	S	0		rapid 2 control
al (1608)	140h	+ <del>mm</del>	+	±g	-	+g	S	17-20+	about same proportion lac- / lac+	
1609	141a	+g	-	±g	-	+	S	1+		
1610	142a	±g	-	+g	-	+	S	1mc		
1611	142b	+g	+	+g	-	+	S	3-	1-	others n.g.
(1612)	142c	±g	+	+g	-	+	S	30+	all lac+	
1613	143a	+	-	+	-	+	S	0		
1614	143c	+ <del>mm</del>	-	+	-	+	S	7-	all lac+	
1615	143d	n.g.								
1616	143e	+ <del>mm</del>	+	+	-	-	S	2-	lac+g	
1617	143f	+	+	+	-	-	S	0		
1618	143g	+ <del>mm</del>	+	+	-	-	S	0		
1619	145b	+ <del>mm</del>	+	+	±	+g	S	0		
al (1620)	145c	+	+	-	-	+	S	7+/-	7+/- (?)	
al (1621)	145d	+ <del>mm</del>	+	-	-	+	S	10+/-	all lac+	
al (1622)	145e	+	+	-	-	+	S	3+/-	5 lac+; 4 failed to grow	
al (1623)	145f	+ <del>mm</del>	+	-	-	+	S	4+/-	1 lac+; 1 lac-	
1624	145g	+ <del>mm</del>	+	-	-	+	S	0		
← 1625	147a	+	-	-	-	+	S	*		
1626	147d	+	-	-	-	+	S	*		
1627	147e	+	-	-	-	+	S	*		
1628	147f	+	-	-	±	+	S	*		
1629	147g	+	-	-	+	+	S	*		
1630	148a	al	+	+g	-	+g	R			
1631	148b	al	+	+g	-	+	R			
1632	149a	+	-	-	+	+	S	*		
1633	149c	+	+	+	-	+	S	15+		
1634	149d	+	+	+	-	+	S			
1635	149f	+	-	-	+	+	S	*		
1636	150c	+	+	+g	-	+	R			
1637	150d	+	+	+g	-	+	R			
(1638)	150e	+	-	-	-	+	R		ca 100+	
1639	150f	+ <del>mm</del>	-	-	±	+	S		appeared SR in cross	
1640	150g	+	+	+g	-	+	S			
(1641)	151a	+	-	-	+	+	S	9+, 3- (?)		
1642	151e	+	-	-	+	+	S	1+		
1643	152a	+	+	+g	-	+	R			
1644	152b	+	+	+g	-	+	R			

Cattin - Marquette

		loc	cello	vue	CK	mal	SM	SRP	
1645	153a	+	-	-	±	+	S	*	
✓1646	153c	+	-	-	±	+	S		Peripheral cy, also 1- in center
1647	153e	<del>+</del> <sup>400mg</sup>	-	-	-	+	S	*	
1648	153f	<del>+</del> *	+	+	-	+	S	*	
1649	153g	+	-	-	+	+	S	*	
1650	154b	+, al	+	+3	-	+	R		
1651	154e	+, al	+	+8	-	+	R		
1652	154f	n.g.	-	-	-	+	S		appeared SP in cross
1653	154g	+	-	-	±	+	S	*	
1654	155e	+	-	-	±	+	S		
1655	155d	n.g.	-	-	-	+	S		
1656	155e	+	-	-	+	+	S	*	
1657	155f	n.g.	-	-	-	+	S		
1658	155fg	n.g.	-	-	-	+	S		
1659	156a	+	+	+3	-	+	S		ca 100+; 2 gummy
1660	156b	+	+	+3	±	+	R		
1661	156d	+	+	+8	±	+	S		1+
1662	157b	-	±	-	-	±	S		
1663	157c	+	+	+9	-	+	S		25+, 5-
1664	158b	+	±	-	+	+	S	*	W1885 strong colony; many separate colonies of W58 in center zone
1665	158c	+	-	-	+	+	S		
1666	158d	+	-	-	+	+	S		11+, 20- Recheck 3+, 6- Wg 38 on recheck, Wg 36 70+, 49-
1667	158e	+	-	±	±	+	S		
1668	158f	+	-	-	+	+	S		
1669	158g	+	-	-	+	+	S		50+, 45- 5+, 9- 11+, 4-
1670	159a	+al	+	±	-	+	R		
1671	159b	+	+	+	-	+	S		keep 1666, 1667 as diff. sees. T.O. 68, 69
1672	159c	+	+	+	-	+	S		
1673	161b	+	-	-	+	-	S		2-
1674	161c	+	-	+	-	+	S		
1675	161d	+8	+	+8	±	+	R		
1676	161e	+	-	±8	-	+	S		1+
1677	161f	+	-	+	-	+	S		
1678	161g	+	-	-	+	-	S		
1679	162b	+	-	+8	-	+	S		ca 600+
1680	162c	+	-	-	+	+	S		ca 100-
1681	162d	+	+	+8	-	+	S		1-
1682	162e	+	±	+8	-	+	S		
1683	162f	+	-	+	-	+	S		partially resistant in SRP plating
1684	162g	+	-	-	+	with cy.	S		
1685	163b	+	-	-	±	+	S		4+
1686	163c	+8g	+	+	-	+	S		
1687	163d	+8g	+	+	-	+	S		
1688	163e	+	-	-	±	+	S		[1+, 2- (?)] [10+, 2-] Wg 42
1689	163f	+	-	-	-	+	S		18+
1690	164b	+	-	-	+	+	S		
1691	164c	+	-	-	+	+	S		
1692	164d	+	-	-	+	+	S		ca 100 mal- or mal slow
1693	165b	+	-	-	-	+	S		37+, 3-
1694	165c	+	-	-	±	+	S		5- or slow
1695	165d	+	-	-	-	+	S		
1696	168b	+	-	-	-	+	S		32+ Recheck 1+, 1-
1697	168c	+	-	-	-	+	S		
1698	169a	+	-	+	-	+	S		
1699	169b	+	-	+	-	+	S		

1625 - 1664

SRP ~~cross~~ done on 5 mal  $\bar{3}$  SM  
by adding 1 drop regular SM  
soln to each suspension.

Strains marked \* showed  
ring of growth around  
edge of plate where  
SM was more dilute,  
though center of plate  
was clear. All such  
growth mal +

Catlin - Marquette

		lac	cello	Suc	CK	med	SM	SRP
1700	169d	+	-	+	-	+	S	400 75+
1701	169e	+	-	+	-	+	S	1-
1702	169f	+	-	+	-	+	S	1+
1703	169g	+	-	+	-	+	S	
1704	170a	+	-	+	-	+	S	
1705	170b	+g	+	+g	-	+	R	
1706	170d	+	-	-	±	+	S	
1707	171a	+g	±	+g	±	+	R	
1708	171c	+g	±	+g	±	+	R	
1709	171d	+g	±	+g	-	+	R	
1710	171e	+	-	-	+g	+	S	1+
1711	172a	+	+	+	-	+	S	
1712	172c	+	+	+	-	+	S	
1713	172d	+g	+	±	-	+	S	
1714	172e	+g	+	+	-	+	S	
1715	172f	+	+	+	-	+	S	
1716	172g	+	-	-	+	+	S	
1717	173a	+	-	+	+	+	S	
1718	173c	+	-	+	+	+	S	
1719	173d	+	-	+	-	+	S	5+
1720	173da	+	+	+	-	+	S	
1721	173e	+	-	+	+	+	S	15+
1722	174a	+	+	+g	-	+	S	
1723	174b	+	-	-	+g	+	S	1+
1724	174c	+	-	-	+g	+	S	
1725	174d	+	-	-	+g	+	S	
1726	176b	+	-	-	-	+	S	
1727	176c	+	-	-	-	+	S	
1728	176d	+	-	-	+	+	S	
1729	176e	+	-	-	-	+	S	
1730	177b	+g	-	-	+	+	S	
1731	177e	+g	-	-	+	+g	S	1+
1732	177f	+	-	-	+	+	S	
1733	lac+ph 1497	+	+	-	-	-	S	
1734	lac+ph 1498	+g	-	±	-	+	S	
1735	lac - ph 1460	+	+	+	±	+	S	
1736	lac+g 1461	+g	+	+	±	+	R	
1737	lac+g 1482	+	+	+	±	+	S	1+
1738	lac+g 1498	+g	+	+	±	+	S	6+, 2 - (?)
1739	lac+g 1500	+	+	+	±	+	S	
1740	lac+g 1524	+	±	±	±	+	P	
1741	lac+g 1525	+	+g	+g	-	+	R	
1742	lac+rough 1528	+	±	-	-	-	S	
1743	lac - fr 1529	-	-	-	-	-	S	24-
1744	lac - fr 1530	-	-	-	-	-	S	10-
1745	lac - fr 1531	-	-	-	-	-	S	
1746	1559	-	-	-	-	-	S	
1747	1560	-	-	-	+	+	S	# 20-
1748	1561	-	-	-	+	+	S	# 20-
1749	1562	-	-	-	+	+	S	# 20-
1750	1563	-	-	-	+	+	S	# 20-
1751	1582	-	+	+	-	+	S	
1752	1564	-	-	+	-	+	S	
1753	1693	-	-	-	-	+	S	# 20-
1754	1699	-	-	-	-	+	S	
1755	1682	-	+	+	-	+	S	# 20-

			lac	cello	Suc	CK	mal	SM	SRP		
1756	lac+ fr	1586	+8		+8	-	+	S	0		
1757	lac al fr	1594	al		+8	518?	+	R			
1758	" " fr	1596	al		+8	-	"?	R			
1759	" " "	1597	al		+8	-	"?	R			
1760	lac- fr	1648	-					S			
1761	lac al fr	1650	al					R			
1762	lac al fr	1651	al					R			
1763	E. coli II	Edwell	+		+	+	-	S			= W1939 = Wg 50
<p><u>Benetton</u> - (from) 9/16/53. (All known - isolates).          117) 1817.</p>											
1764	(Coli 0558)	J.D. 798	+		-	-	+	R			
1765		J.D. 790	+		+	-	+	S			
1766		J.D. 2711	+		+	-	-	S			
1767		J.D. 6816	+		-	-	+	S			1+L+ 1+L+
1768		J.D. 6882	+		-	-	+	S			
1769		AB 1	+		-	-	+	S			2+ 1+
1770		AB 2	+		-	-	+	S			
1771		AB 3	+		+	-	-	S			
1772		AB 6	+		+	-	-	S			
1773		AB 7	+		+	-	-	S			1-
1774		AB 15	+		+	-	-	S			1-L-
1775		AB 21	+		+	-	-	S			
1776		J.D. 888	+		-	-	+	S			
1777		J.D. 890	+		-	-	+	S			
1778		J.D. 905	+		-	-	+	S			
1779		J.D. 3601	+		-	-	+	S			
1780		J.D. 903	+		+	-	-	S			
1781		AB 5	+		+	-	-	S			
1782		AB 27	+		+	-	-	S			
1783		AB 53	+		+	-	-	S			
1784		AB 52	+		+	-	-	S			
1785		AB 46	+		+	-	-	S			
1786		AB 5087b	+		+	-	-	S			
1787		J.D. 900	+		-	-	+	S			
1788		J.D. 917	+		-	-	+	S			
1789		AB 4	+		+	-	-	S			
1790		AB 8	+		+	-	-	S			16+
1791		AB 9	+		-	-	+	S			<del>Reference</del>
1792		AB 10	+		-	-	+	S			<del>Reference</del>
1793		AB 11	+		-	-	+	S			
1794		AB 12	+		-	-	+	S			
1795		AB 14	+		-	-	+	S			
1796		AB 16	+		+	-	-	S			2lac-
1797		AB 17	+		+	-	-	S			<del>Reference</del>
1798		AB 18	+		+	-	-	S			<del>Reference</del>
1799		AB 19	+		+	-	-	S			<del>Reference</del>
1800		AB 20	+		+	-	-	S			<del>Reference</del>

				fac	alb	rac	ck	no	etc	S.R.P.		
										117/187		
1801	Class 55	AB	22	+		-	+	+	S			
1802		AB	23	+		-	+	+	S			
1803		AB	24	+		+	-	-	S			
1804		AB	25	+		+	-	-	S			
1805		AB	26	+		+	-	-	S			
1806		AB	28	+		+	-	-	S			
1807		AB	29	+		+	-	-	S			
1808		AB	30	+		+	-	-	S			
1809		AB	31	+		+	-	-	S			
1810		AB	32	+		+	-	-	S			
1811		AB	33	+		+	-	-	S			
1812		AB	34	+		+	-	-	S			
1813		AB	36	+		+	-	-	S			
1814		AB	37	+		+	-	-	S			
1815		AB	38	+		+	-	-	S			
1816		AB	39	+		+	-	-	S			
1817		AB	40	+		+	-	-	S			
1818		AB	41	+		+	-	-	S			
1819		AB	42	+		+	-	-	S			
1820		AB	43	+		+	-	-	S			
1821		AB	44	+		+	-	-	S			
1822		AB	45	+		+	+	-	S			
1823		AB	47	+		+	-	-	S			
1824		AB	48	+		-	-	+	S			
1825		AB	49	+		-	-	+	S			
1826		AB	50	+		-	-	+	S			
1827		AB	51	+		-	-	+	S			
1828		AB	53	+		-	-	+	S			
1829		AB	54	+		+	-	+	S			
1830		AB	56	+		-	+	+	S			
1831		AB	57	+		-	+	+	S			
1832		AB	58	+		+	-	-	S			
1833		AB	59	+		+	-	-	S			
1834	Class 1134	AB	60	+		-	+	-	S			2+ checked o
1835		AB	61	+		+	+	+	S			
1836		AB	62	+		-	+	-	S			
1837		AB	63	+		-	+	-	S			
1838		AB	64	+		-	+	-	S			
1839		AB	65	+		-	-	-	S			
1840		542)69		+		-	-	-	S			
1841		5344		+		-	-	+	S			
1842	Class 0236	AB	1	+		-	+	+	S			1+ checked o
1843		AB	2	+		-	-	+	S			
1844		AB	3	+		-	-	+	S			
1845		AB	4	+		-	+	-	S			1- checked o
1846		AB	5	+		-	-	-	S			1- checked o
1847		AB	6	+		-	-	+	S			1+ checked o
1848		AB	7	+		-	-	+	S			
1849		AB	8	+		-	-	+	S			
1850		AB	9	+		-	-	+	S			8+ checked o



Ewing coli 055

O#	Ewing no.	Gel	Mel	Mtl	Suc	Celb	lac	Xyl	Smtl	SM	Ti-7; p422	+1485	λ la	1177	1817
1872	1	3872.50	+	+	-	-	-	+	all	S			all R		
3	2	5624.50	+	+	+	- <sup>m</sup>	↓	+	trials	S					all O except where noted
4	3	6556.50	+	-	+	+	↓	+		S					O <sup>+</sup> single as Mel <sup>+</sup>
5	4	53.51	+	-	+	+		+		S					
6	5	54	+	-	+	+		+		S					
7	6	55	+	-	+	+		+		S					
8	7	56	+	-	+	+		+		S					
9	8	57	+	-	+	+		+		S					
50	9	58	+	-	+	+		+		S	T <sub>1</sub> <sup>s</sup>				
1	10	59	+	-	+	+		+		S					
2	11	60	+	-	+	+		+		S					
3	12	61	+	-	+	+		+		S					
4	13	162	+	+	1-	0		-		S					O <sup>+</sup> O <sup>+</sup>
5	14	163	+	+	-	0		-		S					O <sup>+</sup> O <sup>+</sup>
6	15	165	+	+	-	0		-		S					O <sup>+</sup> O <sup>+</sup>
7	16	1703	+	+/-	-	S		-		R					
8	17	1704	+	+/-	-	S		-		R					
9	18	588.52	+	+/-	S <sup>+</sup>	+		+/-		R					
90	19	589.52	+	+	+	+		+		S					= 122691 = 1265 O <sup>+</sup> 1/5-√ -
1	20	590	+	-	+	+		↓		S					
2	21	591	+	-	+	+	↓			S					
3	22	967	+	+	+	+				S					3- 0
4	23	5913	+	+	+	+				S					
5	24	5925	+	-	+	+		↑		S					
6	25	5926	+	-	+	+		↑		S					

Smal  
F- F+

all O except where noted  
O<sup>+</sup> single as Mel<sup>+</sup>

O<sup>+</sup> O<sup>+</sup>

O<sup>+</sup> O<sup>+</sup>

= 122691 = 1265 O<sup>+</sup> 1/5-√ -

3- 0



Ewing coli O111

1897  
1500  
1  
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O#	Ewing #	λ type T	1	2	3	4	5	6	7	8	lac	auc	glu	gal	mal	xyt	allo	SM	x1177	F+
26	805.50 #67	all λ <sup>R</sup> 1/2									S				+	+	-	S	0	0
27	806.50 #72										S				+	+	↓	S	0	0
28	807.50 #82										S				+	+	↓	S	26+	34+ ✓
29	808.50 #95										S				+	+	↓	S	1+	0
30	1332.50	+ (905)									S				+	+	↓	S	7+	+
31	1333	+									S				+	+	↓	S	0	0
32	1334										-				+	+	↓	S	0	0
33	1594										S				+	+	↓	R	0	0
34	5267										S				+	+	↓	R	0	0
35	5268 or 81										S				+	+	↓	R	0	0
36	5798										+S				+	+	↓	R	0	0
37	5799										S				+	+	↓	R	0	0
38	5500										S				+	+	↓	R	0	0
39	5501										S				+	+	↓	R	0	0
40	5623	+ 1485									↑				+	+	↓	S	0	0
41	5690										↑				+	+	↓	S	1-	0
42	5918										↑				+	+	↓	S	0	0
43	5919										↓				+	+	↓	S	0	0
44	6170 date 2										S				+	-	↓	R	0	0
45	6171 "3										S				+	-	↓	R	0	0
46	6172 "4										S				+	-	↓	R	0	0
47	6238										-				-	+	↓	S	1+	0
48	6239										-				-	+	↓	S	6	1+
49	6240										↑				-	+	↓	R	0	0
50	6241										↑				-	+	↓	R	0	0
51	6338 ↑										↑				-	+	↓	R	0	0
52	1795.51										↑				+	-	↓	R	0	0
53	2092.57										↑				+	+	↓	R	0	0
54	585.52										S				+	+	↓	S	0	0
55	587										1				-	+	↓	S	0	0
56	588	+ 1485									S				+	+	↓	R	0	0
57	718										S				+	+	↓	R	0	0
58	719										S				+	+	↓	R	0	0
59	3546	± (diffuse)									-				-	+	↓	S	2+	0
60	4957										↑				+	-	↓	S	0	0
61	5927	± (diffuse)									↑				+	+	↓	R	0	0
62	5281										↑				+	+	↓	R	0	0

all T<sup>R</sup>  
all protos on SM

all +  
except  
↓ 41  
51

+ 1485

+ 1485

± (diffuse)

± (diffuse)

Plated on SM  
O 29 3 Malt  
O 25 8 Malt -  
O 51 0

F- F+

26+ 34+ ✓  
1+ 0  
7+ + ✓  
0 0  
0 0

0 0  
1- 0

1+ 0  
6 1+

0 0  
0 0  
0 0

2+ 0  
0 0

5281  
5281  
5281

Ewing coli from ~~(f 10)~~ France. 5/55.

All  $\lambda, \lambda_2, T_1 - T_7$  resist.

	Ewing#		Lac.	Colo	Pho	Mal	M.P.	Xyl	ST	RTS Lac. ST.	
										122	157
1933	586-52	055 BS H6 (sporadic M'ken).	+	-	+	-	-	4	S	0	0
4	589-52	"								0	0
5	590-52	"								0	0
6	591-52	"								0	0
7	3320-54	" (sporadic Chi).								0	0
8	3321-54	055 BS H10 ( " " )								0	0
9	3701-54	055 BS H- ( " " )								0	0
40	3710-54	0535 H- ( " " )								0	0
1941	121-55	0111 B4 H- (Outbreak Fla)								0	0
2	124-55	"								0	0
3	128-55	"								0	0
4	4869-54	" (Outbreak, Pa.)								0	0
5	4870-54	" ( " " )								0	0
6	3714-54	" (Sporadic Chi).								0	0

Note 10/56. By this series 589-52 is not futile.

(776-1934). z.

776-1890

Cultures from Karokasević  
(Yugoslavia)

7/55 DCB

776-

- 1947 82 (0111-B4)
- 48 96 (0111-B4)
- 49 30R (0111-B4)
- 50 V57 (0111-B4)
- 19 51 C173 (0111-B4)
- 52 64 (055-B5)
- 53 Dd13 (055-B5)
- 54 92 (0111-B4)
- 55 93 (0111-B4)
- 56 1015 (0111-B4)
- 57 Dc 173 (0111-B4)
- 58 21 (055-B5)
- 59 Da 39 (055-B5)
- 60 Dc 99 (026-B6)
- 19 61 C76 (0111-B4)
- 62 r 26 (055-B5)
- 63 1064 (055-B5)
- 64 30 wf (0111-B4)
- 65 V97 (026-B6)
- 66 V101 (055-B5)
- 67 96 (026-B6)
- 68 V16 (026-B6)
- 69 47 (0111-B4)

AUG 17 1955

F Oroskov

1970 1064 = ~~055 B5 H6~~ 055 B5 H6  
 1972 972 " "  
~~972~~

~~1972~~ 1971 Stolar P " "

1973 Stolar W 0111 B4 -  
 1974 abradum 4 0111 B4 -  
 1975 Janna P 0111 B4 -  
 1976 416 0111: B4: H2

OCT 12 1955

1977 1064 kac + Helt } see letter  
 1978 1064 kac ± Helt }

x1177 (F-) x1817 (F+)

o o

o (but 3  
2) com

o o

102 m ea incl control  
o o

July 8, 1955. Resume

SAP tests on named cultures.

① Fredericq series = 776-96-108 (xw1177) 2 kept as w9,10

w1377, 1395-97 xw1177

11/17/50 B/6 w1362 w1376 w1113

11/1/51 Evening

? were Shapiro's other strains  
(w1028 etc.) were tested?

for just 1500, mostly only 1177  
as parent.

Summary of Serotyping. wg series 1-50 inclusive.

Feb. 1953. ~~summary~~

(l.e. rough)

notes  
strains omitted from table below were self agglutinable either before or after boiling or were unstable. H typing wherever it was possible to motilize the bacteria. Only in O neg. strains could K reading be obtained, during the interval that the typing was attempted. Method summarized in raw data. Special emphasis on wg not done before by Ewing, or by Skaar. Some reactions only up to group.

- 1. O - H + (new group)
- 3. H - (skaar); O = 8
- 4. " " ) O = C + H group. K present.
- 11. ?
- 12. ) O-
- 13. morphol. rough. H: 13 + group F.
- 14. O-
- 15. H: A + C. O = 1 (12)
- 16. H = A + C
- 17. H - skaar. confirmed
- 18. " " " "
- 19. " " " " O - . K 19
- 20. H: B run down to H 7.
- 23. O-
- 25. H = 4
- 26. H = 1
- 27. H - Skaar
- 28. O-
- 29. H = C, F, G. O-
- 30. H = F. ) ) O = 27
- 31. H - skaar. O-
- 32. O-
- 33. H group A. 47. O (4)
- 35. H " E. O 21
- 36. H : A + C. O 9
- 37. 2 types: K- O 4, 18. O+K+. H N D, F, G (A)
- 39. O = 4 (18)
- 40. O = 7
- 41. H: G, but late. O = 77
- 43. H: 4, C, F,
- 44. H: C, E, F. O 26 (21)
- 45. O = 77
- 46. H + 77 O = 76
- 47. H = 13, O - K 3 (23)
- 48. H: F O = 81
- 49. rough

O 124 H-20 poly  
21-25 single  
5 titration series

K 60 no polys

A 7 32 → 7 polyvalent sera search.