

PHL - U. W.

	Lys	cblla	Suc		
709	-	+ -	-		
710	-	+ -	-	0	
711	+	+ F <sup>v</sup>	-	50+, same var.	2 Lact + others 4-5.
712	+	+ -	+	2+	
713	+	+ -	-	0	
714	+	+ -	-	0	
715	+	+ -	-	0	
716	+	+ +	+	0	
717	+	+ -	+	H	M+L+
718	+	+ -	+	0	
719	+	+ -	+	0	
720	+	+ -	-	semi turbid +, -	tryptic; no further growth
721	+	+ -	-		Proteus; +
722	+	+ -	-		swirl -?, corner of plate
723	+	+ -	-	ca 200+	mostly NG
724	+	+ -	±	6+	Same L - restrict squanders.
725	+	± -	±	0	
726	+	+ -	-	0	
727	+	+ -	±	0	
728	+	+ + <sup>v</sup>	-	1+	1-?
729	+	+ -	-	0	2 Lact + {NG} result

sl  
722  
723  
724

Berkman - Chicago

	Lys	cblla	Suc		
730 T-193 F	-	- -	-	7+	4-g.
731 T-294 U	+	+ ± <sup>v</sup>	-	10+	4-g.
732 T-374 U	F	+ -	+ <sup>v</sup>	ca 500+	4-g., 2 lact
733 T-1891 U	-g	+ <sup>v</sup>	+ <sup>v</sup>	T	
734 T-67 U	+g	+ -	-	0	
735 T-61 F	+g	± -	+	0	
736 T-481 F	+g	± -	+	0	
737 T-1817 AEROGENES	±g	- -	+ + <sup>v</sup>	T	
738 T-179 F	-g	± -	+g	1v. muc ±	
739 T-1817 Pa	±g	- -	+g	T	

724: grow out very slowly on EMS lac var.

Repeat 724  
4-8-52 731 parent -

A-Malt  
unleavened.

Bentham - Chicago

6/26/51

			Lac	cb	Suc	Ch
740	T-721	U	+	++	-	-
741	T-568	U	tg	-	-	-
742	#831	U	RT. KIDNEY	+	-	-
743	P-228373	F	+	-	-	-
744	P-226566	F	+	-	-	-
745	P-525618	F	+	-	-	-
746	P-525656	F	-	+	-	-
747	P-442010	F	+	++	-	-
748	T-503	F	+	++	-	-
749	P-526647	F	-g	+	-	-
750	P-525627	F	+	-	++	-
751	T-855	F	-g	+	-	-
752	P-523641	F	+	-	-	-
753	P-524786	F	+	-	+	-
754	P-447929	F	+	+	-	-
755	T-444	Sputum	-	-	-	-
756	P-525625	F	+	++	-	-
757	T-581	F	+	-	-	-
758	T-789	BILE	(-)	-	-	-
759	T-543	U	RT. URETER (-)	-	-	-
760	T-514	F	-	-	-	-
761	T-826	U	tg	++P	-	-
762	T-571	F	tg	-	-	-
763	T-566	F	+	-	-	-
764	T-677	WOUND	tg	+	-	-
765	526561	F	-	Mal - slow	-	-
766	T-567	BILE	+	ng	+	-
767	T-669	BRON. ASPIR.	-	-	-	-
768	T-735	U	+	-	-	-
769	T-630	PUS	+	-	-	-
770	T-586	BRON. ASPIR.	+	-	-	-
771	T-455	WOUND	tg	+	-	-
772	T-845	F	+	-	-	-
773	T-721	LUNG (POST)	tg	g	-	-
774	T-547	VAGINA	tg	-	-	-
775	T-481	F	-g	+	-	-
776	P-525639	F	+	-	-	-
777	526446	U	-	-	±	+
778	P-511731	F	+	-	-	-
779	P-526931	F	+	-	-	-
780	P-449019	F	tg	-	-	-
834 781	526391	U	NG	+	-	-
782	T-618	PLEURAL FL.	-	+	-	-
783	522900	U	+	-	-	-
784	281645	F	-g	-	-	-
785	T-572	F	tg	-	-	-
786	512712	U	-	-	-	-
787	T-584	F	tg	-	-	-
788	459541	F	g	-	-	-

EMSSm Mal (Lac)

200+	n.g.
60 nuc?	n.g.
Malt 30 small Mal - ?	slowly lac
ca 30 " "	NG lac
4 nuc +	lac-pap?
0	
0	
1?	Lac + Malt
0	
0	
Nuc +	n.g.
50+, var size	n.g.
many +	n.g.
" "	n.g.
50 M+	mostly n.g. i. lact
T	
0	
0	
150+	NG
6+	NG
20 nuc + 15E?	Mostly n.g. 2 lac
150+ var size	3 lact others n.g.
100+ var size	1 lact; n.g.
4+	NG
all Malt	10 lact
Mal - 2	lac - 2
0	
Nuc +	n.g.
0	
0	
13+ ca 5 small -	
20 Nucraft	3+
100+ mostly n.g.	1-
50+ mostly n.g.	1+
300+ " "	1+
2+	
50+	
T	
T	
try: nuc to all Malt, small	
T	
30+ most n.g.	1-
T	
T	
0	

sl

sl

Bentham - Chicago 6/26/51

			Lac	Ch	Mal	Suc	Lg
789	P-65318	F	+	-	-	-	-
790	414989-P	F	+	-	±	±	-
791	P-525654	F	+	-	-	-	-
792	T-520	u	+	-	-	-	-
793	P-525686	F	-	-	-	-	-
794	P-487660	F	+	-	-	-	-

T  
T  
T  
~~2~~ all 3+  
0

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795	151	H.B.	+	-	-	-	-
796	152	H.B.	+	-	-	-	-
797	153	H.B.	+	-	±	-	-
798	154	H.B.	+	-	±	-	-
799	155	H.B.	+	-	+	-	-
800	156	H.B.	+	-	-	-	-
801	158	H.B.	+	-	±	-	-
802	158	H.B.	+	-	±	-	-
803	159	H.B.	+	±	±	-	-
804	160	H.B.	+	-	±	-	-
805	161	H.B.	+	-	-	-	-
806	162	F	tg	-	-	-	-
807	163	H.B.	+	-	-	-	-
808	164	F	+	-	-	-	-
809	165	H.B.	+	-	-	-	-
810	166	H.B.	+	-	mutab. ++	±	-
811	167	H.B.	±	-	±	-	-
812	168	H.B.	+	-	±	-	-
813	169	H.B.	+	-	-	-	-
814	170	H.B.	tg	-	-	-	-
815	171	H.B.	tg	-	-	-	-
816	172	F	+	-	-	-	-
817	173	H.B.	±	-	-	-	-
818	174	H.B.	±	-	±	-	-
819	175	H.B.	±	-	±	-	-
820	176	H.B.	+	-	±	-	-
821	177	H.B.	+	-	-	-	-
822	178	H.B.	+	-	±	-	-
823	179	H.B.	+	-	-	-	-
824	180	H.B.	+	-	-	-	-
825	181	F	+	-	±	-	-
826	182	F	tg	-	-	-	-
827	183	F	+	-	-	-	-
828	184	F	+	-	-	-	-
829	185	F	+	-	-	-	-
830	186	F	+	-	-	-	-
831	187	COLON	+	-	-	-	-
832	188	COLON	+	-	-	-	-
833	189	COLON	+	-	-	-	-

0  
0  
1+  
400  
T  
500+  
500+  
T  
semi T some-?  
" " "  
" " "  
T  
semi T some-  
20-30 kg-? all lact, pub. mat.  
T  
semi T some-  
semi T some-  
" "  
" "  
" "  
T  
O  
semi T -  
T  
semi T; some-?  
"  
T  
O  
semi T some-?  
" all+  
300+  
semi T  
T

# RECHECK. 776 types.

No.	SLANT	WG	Previous history			Control	x	lac	mal
			Mal	lac	Remains				
629	✓		5+	+,-	Lac -				
✓ 635	✓		100	100					
644	✓		30	30					
655	✓		50+5-	-(+)					
657	✓		30-	-					
658	✓		40+	+					
661	✓		2+1-?		v.sm		v.sm.		
671	✓		100+	+	T		T		
alg # 672	✓	Mal+ lact pure D12	10+, ±	+ ±	O		15 variable +, (←?)		
690	✓		4+	+ 2 typ	O		ca 15+, bc legd..		
694	✓		600+	+	200-		200-		
722	✓		small	u.g?	v.sm.		40 vsm		
724	✓		6+	-(spr?)	lact ✓				
731	✓		100+ (-?)	u.g.	Turbid		Turbid		
765	✓		?-	-+?	60-		60-		
772	✓		13+ $\frac{5}{sm}$		ca 15+		<del>20+</del> 600#		
810	✓					40-	300+		
804	✓	From plate			semi T		semi T.		

Rechecks 772, 690, 672

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781  
~~834~~ 190 ILEUM

lac cb

T

Vaughn

834	127	+	-
835	129	+	+
836	130	+	-
837	160	+	+
838	167	+	-
839	168	+	+
840	187	+	+
841	188	+	+
842	331	(+)	-
(843)	475	(+)	+
BENHAM 844	P-465454	+	-
846			

W1647

W1648

T  
T  
T  
250 small, variable Malt  
T  
10 Mal-odor  
200 variable Malt; 2 types  
50 variable +  
T  
100 large Malt  
semi-T. Ryeat!

804

805  
206 etc

may be same organism.

Z. W - P. H. L. 7/10/57 all  $\lambda^+$  Mal<sup>+</sup> S<sup>S</sup>

	LAC	Cl <sup>+</sup> Sec <sup>+</sup>	Mal <sup>+</sup> Z <sup>+</sup>	S	
845	+	(P) +	-	-	0
846	+	-	-	-	0
847	+	- ++	-	-	2+
848	+	-	-	±	0
849	+(g)	-	-	-	0
850	+(g)	-	-	++	0
851	+	- +++	-	-	0
852	+	-	-	-	0
853	+	-	-	-	0
854	+	+ +	-	-	0
855	+	- +++	-	-	0
<del>856</del>					

Repeat, + units/penicillin to mixture with W1177 in Permassoy

846-850 } no prototrophs S<sup>R</sup>.  
 852-855 }

exp. to test activity of penicillin in stimulating recombination

Berkham - Chicago 7/16/51

all  $\Delta^R$  S<sup>S</sup> Malt

EHS/7d sm

	LAC	Cb	Suc	Mal	ck	S	
856 P-448151 F	+	-	++	-	-	S	T
857 P-457730 F	+	-	-	-	-	SR	T
858 P-278502 F	+	-	-P	++	-		T
859 527869 U	+	-	+	-	-		T
860 489015 U	+	-	-	-	±		300 variable +
861 528763 U	+	-	++	-	-		O
862 P-301814 F	±	+g	+g	-	-		O
863 P-406231 F	+	-	-	-	-		T
864 P-525666	+	+g	+g	-	-		40 Malt +
865 P-446497 F	+	-	-	-	±		T
866 P-528819 F	+	-	±	-	-		O
867 ANL101126 F	+	-	±	-	-		O
868 479425 U	+	-	++	-	-		O
869 P-497362 F	+	-	++	-	-		T
870 P-434711 F	(-)	-	-	-	-		It
871 P-522918 F	+	-	-	-	-		T m Malt; O m Lac !!
872 P-487631 F	+	-	±	-	-		T
873 P-500604 F	+	-	-	-	-		T
874 P-522826 F	+	-	± <sup>sk?</sup>	-	-		T
875 P-440777 F	±	±	++	-	-		I
876 P-407476 F	+	-	-	-	-		T
877 P-453521 F	+g	+g	+g	-	-		100 mure
878 P-412280 F	+g	rg	rg	-	-		60 mure
879 P-522847 F	(S)	-	-	-	-	Mel-	60 mure (sm) ±
880 P-525658 F	+	-	-	++	-		O, some v. tum
881 P-190341 F	+	-	-	++	-		T
882 P-414666 F	+	-	-	-	-	lysogenic	T
883 ANL101212 F	+	-	++	-	-		T
884 P-447944 F	+g	rg	rg	-	-		1080
<del>885 P-526955 F</del>	<del>+</del>	<del>-</del>	<del>-</del>	<del>-</del>	<del>-</del>		
886 P-431475 F	+	-	-	-	-		O

sl



C.P. Miller - U. of Chicago - 9/23/57

all Mat+S<sup>s</sup>

	LAC	cb	ch	Suc	Suc	
887	191	H.B	+	-	- <sup>p</sup>	0
888	192	"	+	-	- <sup>p</sup>	0
889	193	"	+	-	tg	0
890	194	"	+	-	tg	0
	1	"				0
891	195	"	+	-	-	T
892	196	"	+	-	-	semi T.
893	197	"	+	-	-	"
894	198	"	+	-	-	"
895	199	"	+	-	-	"
896	200	"	+	-	-	"
897	201	"	+	-	-	0
898	202	"	+	-	+ <sup>g</sup>	0
899	203	"	+	-	+ <sup>g</sup>	0
900	204	"	+	-	-	0
						0
901	205	"	+	-	-	0
902	206	"	+	+	-	T
903	207	"	+	+	± <sup>p</sup>	T
904	208	"	+	-	± <sup>p</sup>	T
905	209	"	+	-	± <sup>p</sup>	semi T.
906	210	"	+	-	± <sup>p</sup>	T
907	211	"	+	-	± <sup>p</sup>	T
908	212	"	+	-	-	T
909	213	"	+	-	-	T
910	214	"	+	-	-	T
						T
911	215	"	+	-	-	T
912	216	"	+	+	-	T
913	217	"	+	+	± <sup>p</sup>	T
914	218	"	+	-	± <sup>p</sup>	T
915	219	"	+	-	-	T
916	220	"	+	-	-	0
917	221	"	+	-	-	0
918	222	"	+	-	-	0
919	223	"	+	-	-	0

Mat±



Miller-U.C.

AA

9/27/57

			Lac	Suc Ck	cb	Mal	
937	120	H.B.	+	+	-	+	0
938	121	H.B.	+	±	-	+	8+
939	122	SPLEEN	+	+	-	+	0
940	123	SPLEEN	+	+	-	+	0
941	124	H.B.	+	-	-	+	1+
942	125	H.B.	+	-	-	+	0
943	126	SPLEEN	+	-	-	+	0
944	127	PATIENT WITH URETHRITIS	+	-	-	+	1+
945	128	SPLEEN	+	+	+	+	0
946	129	SPLEEN	+	+	+	- <sup>m</sup>	2- <sup>m</sup>
947	130	H.B.	+	+	+	+	0
948	131	"	+	-	-	+	0
949	132	"	+	-	-	+	1+
950	133	"	+	-	-	+	0
951	134	"	+	+	-	+	0
952	135	"	+	+	-	+	0
953	136	"	+	-	-	+	0
954	137	"	+	+	-	- <sup>m</sup>	0
955	138	"	+	+	-	+	0
956	139	"	+	•	-	+	0
957	140	"	+	•	-	+	ca 12 variable; satellite
958	141	"	+	-	-	+	0
959	142	"	+	-	-	+	0
960	143	"	+	-	-	+	0
slant 961	144	"	+	-	-	+	T
962	145	"	+	+	-	- <sup>m</sup>	semi T, (many +, -)
963	146	SPLEEN	-	±	+	+	SR
964	147	"	-	-	+	+	T
965	148	"	-	+	+	+	SR
966	149	"	±	-	-	+	T
967	150	"	(± slow)	-	+	+	0

962 Lac+ok, Mal-<sup>mut.</sup> Same for retest. Colonies on EMS seen w.g. n transfer.

Benham - Chicago

		lac	cl	DR	CK	Suc	Mal	ETS	Malson
968	T CARTER, EDITH U	+	-	-	-	-	+	0	
969	T CROWLEY, ERRON RT. EAR	+	++	-	+g	-	+	0	
970	T MCKINNEY, ELIZ. F	+	+ mix?	-	-	-	+	0	
971	T BOSSI, CHARLOTT. F	-	-	-	-	-	-	0	
972	T MENAGUO, RUTH F	+	-	-	-	-	-	0	
973	T FOWLER, MATTIE U	+g	+g	-	+g	-	-	0	
974	T QUAN, JENNIE F	+	-	-	-	-	-	0	
975	T MILLER, HAZEL F	+	-	-	+	-	-	0	
976	T STINE, ALPA F	+	-	-	-	-	-	0	
977	T SMALL, SANDRA U	+g	+g	-	+g	-	-	0	
978	T WILKINSON, GUY F	+	-	+	+	-	-	1+	
979	T CHRISTOPHER, J. WOUND	+ P	-	-	+	-	-	4+ 3g.	
980	<del>946</del> 955-	-	-	-	±	-	-	0	
981	T MCHARY, LOVET Sp. FLUID	+	-	-	-	-	-	0	
982	T O'NEIL, IRAE F	-	-	-	+	-	-	0	
983	T SMITH, MARY F	+	-	-	+	-	-	3+	
984	T MURRAY, L.V. LONG	+	-	-	-	-	-	0	
985	T REISCH, CAROLINE F	+	-	-	-	-	-	T	
986	938 -	-	-	-	-	-	-	T	

Malt  
S<sub>6</sub>

Benham - Chicago 9/30/51

		LAC	cb	Clr	Sue	Mal	S	
987	SHAWAWEIT, D. ISCHIAL ABSCESS	-	-	+	-	-	-	0
988	GANSKAT, A. U	+g	+g	-	+g	-	-	0
989	BIRRIANO, M. F	+	-	-	-	-	-	0
990	NORMANT, A. RT. EYE	+	-	-	-	-	-	0
991	SKINNEY, M. U	-	+	-	+	-	-	4+
992	FORTNER, M. THROAT	+	-	-	-	-	-	2+
993	MARTIN, V. PANCREAS	+	-	-	-	-	-	2+
994	ISHMIAL, D. WOUND	+	-	-	-	-	-	T
995	SMITH, STEPH. TRACHEOTOMY	+g	+g	-	+g	-	-	T
996	WILLIAMS, N. LOCHIA	+	-	-	-	-	-	T
997	HENLEY, D. PERITONEUM	+	-	±	-	-	-	0
998	CHRISTOPHERSEN, E. PENIS	+	-	-	-	-	-	0
999	McMikEL, M. U	+g	+	-	+g	-	-	0
1000	YORK, DEROT. F	+g	-	-	-	-	-	0
1001	JORDAN, DWIGHT F	+	-	-	-	-	-	0
1002	HAND, WILLIE U	-	-	+p	-	-	Mal = S <sup>s</sup>	
1003	THOMPSON, A U	+g	+g	-	+g	-	SR	
1004	CORRIGAN, J. U	+	-	-	+	-	-	T
1005	DIBENETTO, T. U	+g	-	-	-	-	-	ca 800 +g
1006	JAFFE, M. U	+g	-	-	-	-	-	0
8-21-51								
1007	LN 101206 F	+g	+	-	+g	+	S	0
1008	LN 101379	+	-	+	-	+	S	0
1009	125993 F	-	+	-	-	+	R? S	0
1010	187447 F	-	-	-	-	±	S	0

Lysogenic.

Retests of colicin-producing strains

8/26/51

776-	Test of colicin activity		XW1695 on EMS-lac-Sm mal	
	vs. 518	vs. W1695		
25	++	-	0	
53	-	-	0	
56	+	-	1+ (slow)	
61	++	-	0	
62	-	-	5+	5+
65B	-	-	0	
70	-	-	T	
75	-	-	0	
90	-	-	0	
93	+	+	1+	1+
95	+	+	11 (slow)	
750	+	+	2+	2+
753	+	-	0	
850	++	-	0	
903	-	-	0	
913	-	-	4+ (slow)	
919	-	-	0	
945	+	+	-	
946	+	+	0	
947	+	-	3+	3+
978	++	-	0	
987	-	-	-	
1002	-	-	-	
1008	++	-	0	
1013	+	+	-	
1016	+	+	0	
1017	+	+	0	
1018	+	-	T	
1028	+	-	1	1+
1036	++	-	0	



Catlin - Marquette - 8-17-51

acc JR

151

ENSPMUM lac-sm

		+	-	+	+	S
		lac	Cb	Smc	Ch	Mal
1011	23a	+				S
1012	26f	+				S
1013	31a	+		+	+	S
1014	35a	+		+	+	S
1015	38a	+		+	+	S
1016	44a	+		+	+	S
1017	45a	+		+	+	S
1018	46d	+		±	+	S
MISS. 1019	51c	+		+	+	S
1020	55e	+		+	+	S
1021	57b	+		+	+	S
1022	58b	+		+	+	S
1023	59a	+		+	+	S
1024	64c	+		+	+	S
1025	66a	+		+	+	S
1026	69b	+		+	+	S
1027	73a	+		+	+	S
1028	74c	+		+	+	S
1029	75a	+		+	+	S
1030	86a	+		+	+	S
1031	89a	+		+	+	S
1032	90b	+		+	+	S
1033	91a	+		+	+	S
1034	94a	+		+	+	S
1035	95a	+		+	+	S
1036	96a	+		+	+	S
1037	102c	+		+	+	S
1038	103a	+		+	+	S
1039	106a	+		+	+	S
1040	107b	+		+	+	S
1041	108a	+		+	+	S
1042	109a	+		+	+	S
1043	110a	+		+	+	S
1044	111b	+		+	+	S
1045	112a	+		+	+	S
1046	113a	+		+	+	S
1047	114c	+		+	+	S
1048	115b	+		+	+	S
1049	116a	+		+	+	S
1050	118a	+		+	+	S
1051	119a	+		+	+	S
1052	121a	+		+	+	S
1053	124a	+		+	+	S
1054	125b	+		+	+	S
1055	127a	+		+	+	S
1056	129d	+		+	+	S
1057	131a	+		+	+	S
1058	132a	+		+	+	S
1059	133a	+		+	+	S
1060	135b	+		+	+	S

W1710 1- 1+? Both lac-Mal-  
W1754 0 later; Fertile  
W1755 0 Fertile  
W1766 2- tiny Fertile  
1+, 1+? → 1lac+Mal+; 1lac-Mal-  
1+  
2+ ?  
T  
W17570 Fertile

dg = didn't grow, prob. marginally resist to Sm.



Catlin - Marquette - 8-17-51

	Lac	Chr	Suc	Chk	Mal	EMS Mal	son
1061	138a	+	-	-	+	4+	
1062	140a	-	-	-	+	0	
1063	143a*	+	+	✓	-+	0	W1758 ? Par: Mal-
1064	145a	-	-	-	+	0	
1065	146b	-	-	-	+	0	
1066	147a	-	-	-	+	0	
1067	150a	-	-	-	+	3±	tiny ?
1068	151b	-	-	-	+	0	
1069	153b	-	-	-	+	0	
1070	154c	-	-	-	+	2-	tiny
1071	155b	-	-	-	+	0	
1072	157a	-	-	-	-	0	n. viable
1073	158a	+	+	+	+	0	
1074	161a	-	+	✓	+	1-	?
1075	162a	-	-	-	+	0	
1076	163c	-	-	-	+	0	
1077	164a	-	-	-	+	0	
1078	165a	-	-	-	+	0	
1079	168a	-	-	-	+	1-	?
1080	169c	-	+	✓	+	1+	
1081	170c	-	+	✓	+	1-	2+? : 2 <sup>lac-</sup> Mal-(blue); 1 <sup>lac-</sup> Mal-light
1082	171b	-	-	-	+	4+	
1083	172b	-	-	-	+	0	
1084	173c	-	+	+	+	0	
1085	174a	-	-	-	+	4+	
1086	175b	-	-	-	+	0	
1087	176a	-	-	-	+	2+	
1088	177a	-	+	+	+	0	

1051: mixed: lac+, - Mal-.  
 A = lac+ (not pure 1st isol.)  
 B = lac- (mutable?)

Recheck 1051, 1071. 1051 shows 2 components on lac. (see over)

10/5/57.

1051A is unstable lact.  
Each of 4 "clean" colonies  
showed lac- components.

UV (10-12 sec  
for 10<sup>-6</sup> surv.)  
increased proportion  
of lac- entered cells,  
but left mostly  
lact. +.

Check through SR mutations.

776 - 1051 = W1710. Possibility of conjugation  
not ruled out.

1051C = stable lac + from B.

Retests:

1051 A	3	lac+ Mal- Xyl- MR±
B	1	lac- Mal- Xyl- MR±
1056	1	++
	1	--
1081	1	lac+ Mal+ Xyl+ MR+
	1	lac- Mal- Xyl- MR-

Check prototrophy

≡ But Par. is Lac+, Mal- Xyl-!

PDS. checked W1710 lac- x W1490 : very high yield  
W1394 : " low or 0.  
W10/57

Berkham - Chicago

8-21-51

T:

			lac	Cl	Suc Cl	Mal sm
1089	383857 <sup>P</sup>	F	+ <sup>g</sup>	+		1+ gummy
1090	366548 <sup>P</sup>	F	+	-		0
1091	437817	<del>abasso</del>	+	-		0
1092	443915 <sup>P</sup>	F	+	-		0
1093	482333	U	±	-		0
1094	502080 <sup>P</sup>	F	± <sup>g</sup>	+		0
1095	516884 <sup>P</sup>	F	+	-		0
1096	P-522824	F	+	-		0
1097	528879	U	+	-		1+
1098	528964	U	-	-		0
1099	529857 <sup>P</sup>	F	+	-		0
1100	<del>XXXX</del> <del>XXXX</del> <del>XXXX</del> <del>XXXX</del> <del>XXXX</del>	<del>abdominal</del> <del>pus</del>	<del>+</del>	<del>-</del>		<del>0</del>

U. W. - P. H. L.

8-21-51

1101	74251		<del>+</del> <sup>g</sup>	+		0
1102	74252		+ <sup>g</sup>	+		0
1103	74254		+ <sup>g</sup> spreader			
1104	74257		+	-		0
1105	74335		+	±		
1106	74336		+(fold)	±		
1107	74351		+	-		
1108	74354		(+), -	-		0
1109	74522		+	-		
1110	74761		+ <sup>g</sup>	+		
1111	74763		+(fold)	+		
1112	75243		+	-		
1113	75789		+ <sup>g</sup>	+		
1114	75791		+	-		
1115	75819		+	-		
1116	75820		+	+		
1117	75860		+	-		
1118	75916		+	-		
1119	76201		+ <sup>g</sup>	+		
1120	76202		±	+		
1121	76209		+ <sup>g</sup>	+		
1122	76307		+ <sup>g</sup>	+		
1123	76308		+	-		
1124	lac-fr. 1108		-	+		0

776 UW PH Lab. 9/14/51

		Lac	Cb.	Suc	ck	Mal	S
1125	—	+	—				
6	78961	+	—				
7	80807	+	—				
8	—	+	—				
9	78349	+	—				
1130	78389	+	—				
1	80742	+	—				
2	78390	+	+				
3	78522	+	—				
4	78960	+	—				
1135	80015	+	—				
6	83552	+	—				
7	78344	+	—				
8	79267	+	—				
9	78953	+	—				
1140	78753	+	—				
1	79125	+	—				
2	79545	+	+				
3	79562	+	+				
4	79361	+	—				
1145	79816	+?	—				
6	85133	+	+				
7	Lac-fp.1133	—	—				
8	78952	+?	—				
9	Lac-fp.1156	—	—				
1150	Lac-fp.1126	—	—				
1	Lac-fp.1127	—	—				
2	77547	+	—				
3	Lac-fp.1138	—	—				
4	77872	+	—				
1155	77546	+	+				
6	79696	+	—				
7	79264	+	—				
8	79180	+	—				
9	Lac-fp.1141	—	—				
1160	Lac-fp.1144	—	—				

U of Chi Berkham

Q<sup>2</sup> A R

	loc	Ch	Sec	CK	Mel	Sm <sup>2</sup>	EMS	med	sw
1161	519345 U	+	+	+ <sup>9</sup>	-	+	R <sup>2</sup>	x	
1162	520214 Abd Inc.	+	+	+ <sup>8</sup>	-	+	R <sup>2</sup>	x	
1163	<del>T138044</del> 1595 F	+	-	+	+	+	R <sup>2</sup>	x	
1164	P428740.14546 F	+ <sup>2</sup>	+	+ <sup>8</sup>	-	+	S	1+	+ <sup>8</sup>
1165	303404 U	+	-	-	+	+	S	0	
1166	532475 U	+	-	-	-	+	R	x	
1167	P410798.1425 F	+	±	+ <sup>8</sup>	-	+	S	0	
1168	360353 U	+	-	-	-	+	S	0	
1169	T602 Halp. Bl.	+	-	-	-	+	R	x	
1170	465546 U	+	-	-	-	+	S	0	
1171	299828 U	-	-	-	-	-			
1172	B3192 Ab	+	-	-	+	+		0	
1173	P501503.1685 F	+	-	-	-	+		0	
1174	239457 U	-	-	+ <sup>8</sup>	-	+		0	
1175	P531933.1649 F	+	-	-	-	+		0	
1176	P443661.1703 F	+	-	-	+	+	S	0	1+
1177	531369 U	+	-	-	+	+	S	0	
1178	532439 U	+	-	-	+	+	S	0	
1179	200517 U	-	-	-	-	-			
1180	530836 Simms	-	-	-	-	-	S <sup>2</sup>	0	
1181	T1260 Bellamy F	+	-	-	-	+	R <sup>2</sup>	0	x
1182	T1287 F	+	-	-	+	+		0	
1183	T1398 U	+ <sup>8</sup>	+	+ <sup>8</sup>	-	+	S	0	
1184	T516 F	+	-	-	+	+	P	x	
1185	T921 F	+	-	-	±	+	S	0	
1186	P527128 F	+	-	-	+	+	S	0	
1187	T807 F	+	-	-	-	+	P	x	
wg 27	488 T1205 U	+	-	+	±	+	S	6-	→ Hal-x <sup>+</sup>
1189	T1258 U	± <sup>8</sup>	-	-	±	+	S <sup>2</sup>	0	
1190	T1681 liver abscess	+	-	-	±	+	S	0	
1191	T436 F	+	-	-	-	+	S	1+	→ lact
1192	T662 F	+	-	-	±	+	S	0	
1193	T1521 U	+	-	-	±	+	S	0	
1194	T1289 U	+	-	-	±	+	S	0	
1195	T605 vag.	± <sup>9</sup>	-	-	±	+	S	0	
1196	T805 F	-	-	-	-	+	S	0	
1197	T1517 U	-	-	-	±	+	S	0	
1198	T1676 F	+	-	-	-	+	S	0	
1199	T582 F	+	-	-	+	+	S	2+	→ lact
1200	T447 U	+	-	-	±	+	S	0	
1201	T1513 abd	+	-	-	±	+	S	0	
1202	T938 lymph node	+	-	-	-	+	S	0	
1203	T855 ?	+	-	-	+	+	S	0	
1204	P530163.1738 F	+	-	-	-	+	S	0	
1205	T569 bile	+	±	+	-	+	S	0	
1206	T704 F	+	-	-	+ <sup>8</sup>	+	S	1+	lact
1207	T917 throat	+	-	-	±	+	S	1+	lact
1208	T526 U	+ <sup>8</sup>	+	+ <sup>8</sup>	-	+	R		
1209	T529 F	+	-	-	+	+	S	0	
1210	P101755 F	+	-	-	+	+	S	0	
1211	T1793 U	+ <sup>8</sup>	+	+ <sup>8</sup>	-	+	S	0	
1212	T1378 sputum	+	+	±	-	+	S	0	
1213	T1606 F	+ <sup>8</sup>	+	+	-	+	S	0	

1194 may be susceptible to CK from 1195

	U. of Chi.	Berham lac	Ch	Suc	CK. Mel	Sm	EMS	mal	Sm
1214	P5324// -1709 F	+	-	-	-	+	S	1+	lac <sup>+</sup>
1215	T1603 F	+ <del>#</del>	-	+	-	+	S	1+	lac <sup>+</sup>
1216	T927 Bld, post mort	-	-	±8	-	+	S	0	
1217	T1785 U	±8	+	±8	-	+	R		
1218	T523 F	+	-	-8	-	+	S	0	
1219	lac <sup>-</sup> fr 1208	-	-	-	-	-	R		
1220	lac <sup>-</sup> fr 1215	-	-	+	-	+	S	0	

Starr - California

all R  
O unless otherwise

1221	T56: 3g	+	-	±9	+	+	S		1+
1222	T64: 3g	+	-	±9	+	+			
1223	T65: 3g	+	-	-	+	+			1+
1224	T66: 3g	+	-	-	+	+			
1225	T69: 3g	+	-	-	-	-			1+
1226	T70: 3g	+	-	-	+	+			
1227	T73: 1g	+	-	-	+	+			
1228	T74: 1g	-	+	+	-	-			1+
1229	T75: 1g	+	+	+	+	+			
1230	T76: 3g	+	-	+	+	+			
1231	T77: 1g	+	-	+	+	+	P		
1232	T78: 3g	+	-	+	+	+	S		
1233	T81: 3g	+	-	+	-	-	R		
1234	T86: 3g								
1235	T131								
1236	T146: 10g	+	-	-	-	-	S		
1237	T152: 10g	+	-	±	-	-			
1238	T153: 10g	+	-	-	-	-			
1239	T155: 3g	+	-	-	-	-			
1240	T180: 3g	+	-	-	-	-			1+
1241	T181: 10g	+	-	-	-	-			
1242	T182: 10g	+	-	-	-	-			4+
1243	T256: 3g	+	-	-	-	-			
1244	T258: 3g	+	-	-	-	-			1?
1245	T259: 3g	+	-	-	-	-			
1246	T260: 3g	+	-	-	-	-			
1247	T287: 3g	+	-	-	-	-			
1248	T288: 3g	+	+	-	-	-			
1249	T289: 3g	+	+	-	-	-			
1250	T290: 3g	+	-	-	-	-			0
1251	T292: 3g	+	-	-	-	-			0
1252	T293: 3g	±8	+	+	-	-			0
1253	T294: 3g	+	-	-	-	-			
1254	T295:	+	-	-	-	-			
1255	T297: 3g	+	-	-	-	-			
1256	T298: 3g	+	-	-	-	-			
1257	T299: 3g	+	-	-	-	-			
1258	T300: 3g	+	-	-	-	-			
1259	T301: 3g	+	-	-	-	-			
1260	T304: 3g	+	-	-	-	-			
1261	T306: 3g	+	-	-	-	-			
1262	T383: 1g	+	-	-	-	-			+

Spruder  
Spruder

	UWPAH lab	lac	Cl	Suc	Ch	Mal	sm		
1263	86518	+	-		±	+			1+
1264	86978	+	-		±	+			1+
1265	86981	+	-		±	+			
1266	87328	+	-		-	+			
1267	88410	<del>+</del>	-		-	+			2+ <del>3</del>
1268	89456	+	-		-	+			
1269	90184	+ <sup>g</sup>	+ <sup>g</sup>		-	+	R		3?
1270	90204	+	-		-	+			
1271	90296	+	-		-	+			
1272	90297	+	-		-	+			
1273	91479	+	-		-	+			
1274	91715	+	-		-	+			
1275	92086	+	-		+ <sup>v. sharp</sup>	+			
1276	lac-fr 1267	-	-		-	-	R	T	pigmented?

776 RESUME  
August 5, 1952.

These cultures have been returned  
 on slants for further test.

W 776	SMal sm x 1177	x 1177F+	x other testers
1362	22 lac <sup>+</sup> . Dimorphic in noted: lac, TS.		
a suc <sup>r</sup> - b			
1547 266 Stuart W1	lac-Mal+	1--✓	Residual lac mutation
1755 1053	Mal+ lac± <sup>+</sup>	1-✓ 1-	Mal-x 1611 ?
1756 1055	Mal-	?	
1757 1060	Mal+	+	
1763 1246	Cliffon K201	--, 0	
1764 1281	Cliffon K93	2- > 100+?; all+	
95	lac Mal+	1-, ?XX.	
232	lac <sup>m</sup> Mal <sup>m</sup>	16? sev?	5+
-731	lac <sup>r</sup> , Mal <sup>r</sup>	(100+, -)(T); [1-?]	small lac-mal-. "utter confusion. Mal-lac- on control!
1390		3+ 11-; 1--✓	0, 0,
1413 ? 1444 }	several hundred + and -		0, 0 later, 0 F1, F--
1507 ++	14, 6-; 9-8		2- <del>8</del> PARENT MOTTLED
1545 ++	2+ 7-;		3+, 10+.
1554 L+M-	60-- , 0, 0		0
1560 ± -?	60+ 3- all lact,		2+ 1- (small) 1002
1575 ++	many -- , 0,		small ++
1578 ++	3+ 4-Σ L+ 0		0, 0
1605 ++ <sup>1</sup>	many - (7, -); 0 0		0
1608 ++	17-20+; 0, 0		0
1622 ++	3+ 6- (4 neg) 20+-		1602: 18+ 4-?
1623 ++	14+ # 1--		1-
1638 ++	100+, T control T cross +, -?		0
1663 ++	25+ 5-, 2+, 1+,		3+ 162
1680 ++	100-, 100+ m X + control		
1689 ++	18+, 4-, 1-sm;		13+, 20-c 1817



1693 ++ 374 3-; 3+1-<sup>small</sup>;  
 1699 1-

2+5-x1817  
 1602 2-

776-  
 Vials.

Also saved in vials and slants  
 slants

11 86 1302  
 89 1303  
 90 1304  
 91 1305  
 98 11  
 1200 14  
 01 15  
 08 16  
 09 17  
 10 18  
 15 19  
 16 20  
 17 83  
 18 84  
 20 85  
 21 86  
 22 87  
 23 88  
 24 89  
 29 91  
 30 92  
 32 93  
 37 94  
 38 95  
 39 96  
 40 97  
 46 99  
 47 1400  
 49 01  
 50 02  
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1421  
 22  
 23  
 24

2 722  
 7 724  
 11 804  
 14 810  
 17 843  
 20 962  
 21 1057  
 27 1074  
 53 1080  
 56 1328  
 58 1454  
 61 1574  
 62 1620  
 93 1621  
 144 1641  
 153 1681  
 208 1692  
 440 1694  
 644 1701  
 658 1731  
 661 1758  
 671  
 690  
 694

W1611  
 SRP crosses: (Wg 4) x wgs 1-30.  
 W1611 (lac<sup>-</sup> S<sup>R</sup> aux) x Wg m (lac<sup>+</sup> S<sup>S</sup> proto)

11/6/52 grew parents together in 5 cc for a day, centrif, washed mco + plated on EMS-lac-sm. One plate per cross. No control plates studied simultaneously. Poor washing (probably) accounts for successive turbidity on some of plates at 42 hrs (when all were skinned). The large spots of larger colonies appear on such plates, then, may or may not be prototrophs.

Wg	# colonies	turbidity
1	40+	-
2	0	-
3	0	-
4	0	-
5	200+	+++
6	28+	-
7	200+	+++
8	0	++
9	0	-
10	0	-
11	0	-
12	1+, 1-	+
13	0	-
14	0	-
15	2+	-
16	0	+
17	0	-
18	0	+
19	0	-
20	0	-
21	400	-
22	0	-
23	0	-
24	100	+++
25	0	-
26	0	-
27	0	-
28	300	+++
29	4+	-
30	3+	-

WG serotypes.

O K H

Kauffmann type    Dr. Shaw    Cunningham    EML    Shaver

- 013

new H

citrate +  
nitrate +  
starch +

Number	Kauffmann type	Dr. Shaw	Cunningham	EML	Shaver
1					
2					
3		8	0	8	0
4		25	0	25	0
5		-			
6		-			
7				2	
8		-			
9				0	12
10				0	x
11				0	
12				15	1, 12
13					13
14					
15		86	12	131	
16					
17		41	0		
18			0		
19					
20				9	7
21					
22					
23					
24		40	13		19
25					4
26		1	12		1
27			0		
28		x	19		
29					
30					27
31		19, 133	0		
32			0		
33		21	4	121	4
34					
35			+	21	
36				9	
37		4	5	4	
38			0		
39		4	5	4	
40		7	0	7	
41					
42				11	
43		21	0?		
44					
45					
46		76	7	76	7
47		X	new		10
48		81	27	81	
49			0		
50			0		

28A

= 37?

x = rough

X     $\phi$     -    Ew    EML    PDS

51					
52	18	46	14	x	✓
53	20	17	0		✓
54	21	20	0		✓
55	25	19	12		✓
56				026/36	0
57				025	

K76 = B20

026

probably duplicate of ug 55