

# Test on F<sub>2</sub> Mothers and Their Progeny

APR 3 1951

## 17-D YELLOW FEVER VIRUS IN PROGENY of F<sub>2</sub> ♀ x ♂

VIRUS - 17-D YELLOW fever virus of 1/18/51 - 10<sup>4.0</sup> in NRS-B-11-4  
0.03 cc - 10<sup>-2</sup> in 1090 RSS FCE.

MICE - Mothers and F<sub>2</sub> ♀ x ♂ Progeny as described below  
W-Swiss Controls - 3-4 wk old.

Litter of 3-3/1/51	Mothers ♀	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
	1 ♀	-	-	-	-	-	W	PP	D																					
	2 ♀	-	-	-	-	-	-	PP	D																					
F <sub>2</sub> ♀ x ♂	3 ♀	-	-	-	-	-	-	CNS	P <sub>n</sub>	P <sub>n</sub>	D																			
	4 ♂	-	-	-	-	-	-	CNS	P <sub>n</sub>	P <sub>n</sub>	D																			

Litter of 10-3/5	Mothers ♀	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
	1 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2 ♀	-	-	-	-	-	-	P <sub>n</sub>	D																					
F <sub>2</sub> ♀ x ♂	3 ♂	-	-	-	-	-	-	P <sub>n</sub>	D																					
	4 ♂	-	-	-	-	-	-	?	Rept Sick	D																				

Litter of 9-3/8	Mothers ♀	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	1 ♀	-	-	-	-	-	-	W	PP	P <sub>n</sub>	D																		
	2 ♀	-	-	-	-	-	-	W	CNS	D																			
F <sub>2</sub> ♀ x ♂	3 ♀	-	-	-	-	-	-	Ant	Ant	Ant	W	Ant																	
	4 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5 ♂	-	-	-	-	-	-	W	CNS	P <sub>n</sub>	D																		
	6 ♂	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

4/13 - m #1  
Sacrificed; brain + cord fluid + titrated 4/13/51 - 10<sup>4.0</sup>

10<sup>-2</sup>

	W-SWISS									CONTROLS																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	-	-	-	-	-	PP	D																					
2	-	-	-	-	-	PP	D																					
3	-	-	-	-	-	PP	D																					
4	-	-	-	-	-	PP	D																					
5	-	-	-	-	-	W	PP	D																				
6	-	-	-	-	-	PP	D																					
7	-	-	-	-	-	-	PP	P <sub>n</sub>	D																			
8	-	-	-	-	-	-	PP	P <sub>n</sub>	D																			
9	-	-	-	-	-	-	CNS	P <sub>n</sub>	D																			
10	-	-	-	-	-	-	CNS	P <sub>n</sub>	D																			

Titrate virus if he dies without  
Paralysis  
10<sup>-3</sup>, 10<sup>-4</sup>, 10<sup>-5</sup>, 10<sup>-6</sup>



17-D YELLOW FEVER VIRUS IN F<sub>2</sub> MOTHERS  
+ (F<sub>2</sub> ♀ x S ♂) PROGENY.

VIRUS - 17-D YELLOW FEVER VIRUS of 1/12/51 - 1090 - NRS-B-11-4  
0.03 cc - 10<sup>-2</sup> in 1090 RSS I.C.C.

MICE - F<sub>2</sub> MOTHERS + THEIR PROGENY (F<sub>2</sub> ♀ x S ♂)  
W-SWISS controls - (34 W<sup>h</sup> D<sup>l</sup>).

	MOTHER	F <sub>2</sub>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Litter of 7-3/14/51 F <sub>2</sub> ♀ x S ♂	F <sub>2</sub> ♀	-	-	-	-	-	-	-	W	P	D																			
	1 ♀	-	-	-	-	-	-	-	W	P	D																			
	2 ♀	-	-	-	-	-	-	-	W	PP	P	D																		
	3 ♀	-	-	-	-	-	-	-	W	(H)	P	D																		

	MOTHER	F <sub>2</sub>	1	2	3	4	5	6	7	8	
Litter of 10-3/19/51 F <sub>2</sub> ♀ x S ♂	F <sub>2</sub> ♀	-	-	-	-	-	-	-	PP	D	
	1 ♀	-	-	-	-	-	-	-	D		
	2 ♀	-	-	-	-	-	-	-	PP	D	
	3 ♀	-	-	-	-	-	-	-	PP	D	
	4 ♂	-	-	-	-	-	-	-	W	D	
	5 ♂	-	-	-	-	-	-	-	W	D	
	6 ♂	-	-	-	-	-	-	-	W	D	
	7 ♂	-	-	-	-	-	-	-	W	D	
8 ♂	-	-	-	-	-	-	-	W	(H)	P	D

	MOTHER	DEAD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Litter of 10-3/21/51 F <sub>2</sub> ♀ x S ♂	F <sub>2</sub> ♀	-	-	-	-	-	-	-	(D)																					
	1 ♀	-	-	-	-	-	-	-	(D)																					
	2 ♀	-	-	-	-	-	-	-	?	PP	D																			
	3 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4 ♂	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5 ♂	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

	MOTHER	F <sub>2</sub>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Litter of 7-3/25/51 F <sub>2</sub> ♀ x S ♂	F <sub>2</sub> ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5 ♂	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6 ♂	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

	MOTHER	F <sub>2</sub>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Litter of 8-3/25/51 F <sub>2</sub> ♀ x S ♂	F <sub>2</sub> ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3 ♂	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## W-SWISS CONTROLS

	1	2	3	4	5	6	7	8
1	-	-	-	-	W	D		
2	-	-	-	-	W	D		
3	-	-	-	-	-	D		
4	-	-	-	-	-	D		
5	-	-	-	-	-	P <sub>2</sub>	D	
6	-	-	-	-	-	P <sub>2</sub>	D	
7	-	-	-	-	-	P	D	
8	-	-	-	-	-	CNS	P <sub>2</sub>	D
9	-	-	-	-	-	CNS	P <sub>2</sub>	D
10	-	-	-	-	-	CNS	CNS	D

17-D YELLOW FEVER IN F<sub>2</sub> MOTHER  
 + (F<sub>2</sub> ♀ x S♂) PROGENY

MAY 3 1951

VIRUS - 17-D Yellow fever virus of 1/18/51 - 1090 - NRS-B-11-4  
 0.03 cc - 10<sup>-2</sup> in 1090 RSS I.C.H.

MICE - F<sub>2</sub> MOTHER + PROGENY (F<sub>2</sub> ♀ x S♂)  
 W-SWISS Controls - (3-4 wks old).

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	MOTHER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Litter of 9-3/31	1 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F <sub>2</sub> ♀ x S♂	2 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3 ♂	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SWISS CONTROLS

	1	2	3	4	5	6	7	8	9
1	-	-	-	-	-	pp	D		
2	-	-	-	-	-	w	pp	D	
3	-	-	-	-	-	w	pp	D	
4	-	-	-	-	-	?	w	D	
5	-	-	-	-	-	?	w	D	
6	-	-	-	-	-	cm	D		
7	-	-	-	-	-	cm	D		
8	-	-	-	-	-	cm	P	D	
9	-	-	-	-	-	cm	P	D	

17-D YELLOW FEVER VIRUS IN F<sub>2</sub> MOTHER  
& (F<sub>2</sub> ♀ x S ♂) PROGENY

MAY 11 1951

VIRUS - 17-D Yellow fever virus of 1/18/51 - 1090 in NRS B-11-4  
0.03 cc - 10<sup>-2</sup> in 1090 RSS - Ice.

MICE - F<sub>2</sub> mothers & their progeny (F<sub>2</sub> ♀ x S ♂)  
MAX SWISS controls (@ 10-12 ♀s)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Litter of 9-4/13/51 MOTHER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F <sub>2</sub> ♀ x S ♂	1 ♂	-	-	-	D	AVNT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Litter of 6-4/15/51 MOTHER	1 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F <sub>2</sub> ♀ x S ♂	2 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Litter of 7-4/14/51 MOTHER	1 ♀	-	-	-	-	W D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F <sub>2</sub> ♀ x S ♂	2 ♀	-	-	-	-	PP D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3 ♀	-	-	-	-	? PP P <sub>2</sub> D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4 ♂	-	-	-	-	(W) P <sub>2</sub> D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5 ♀	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6 ♀	-	-	-	-	PP D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7 ♂	-	-	-	-	W P <sub>2</sub> D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						? (W) D																						

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Litter of 7-4/14/51 MOTHER	1 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F <sub>2</sub> ♀ x S ♂	2 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5 ♀	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6 ♂	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MAX SWISS (CONTROLS)

	1	2	3	4	5	6	7	8	9
1	-	-	-	-	-	P <sub>2</sub> D	-	-	-
2	-	-	-	-	-	PP D	-	-	-
3	-	-	-	-	-	W D	-	-	-
4	-	-	-	-	-	W D	-	-	-
5	-	-	-	-	-	W PP P <sub>2</sub> D	-	-	-
6	-	-	-	-	-	(W) (W) P <sub>2</sub> D	-	-	-
7	-	-	-	-	-	? (W) P <sub>2</sub> D	-	-	-
8	-	-	-	-	-	? (W) P <sub>2</sub> D	-	-	-
9	-	-	-	-	-	(W) P <sub>2</sub> D	-	-	-
10	-	-	-	-	-	-	P <sub>2</sub> D	-	-

F<sub>1</sub> ♀ - 5 (R♀ + S♂), 7, 4, 5 = 24  
 3 (S♀ + R♂), 10, 2, 3 = 18 "

Use for  
 Test with  
 French Neurotop

F<sub>1</sub> ♂ - 10 ♂

CH. Swiss - 8 large Swiss ♀  
 Max u - 9 " " ♀

Breeding of Max Swiss ♀ (aa) + Resistant Backcross ♂ (Aa)

Expected result = Aa + aa = 50% susceptible

Date of litter	Origin No.	No. on 3/22/51
2-13-51	10	2
2-15-"	9	2
2-17-51	9	5
2-17-51	7	2
		} combined
2-16-51	10	10
2-18-51	10	3
2-21-51	8	3
2-21-51	6	4
2-22-51	11	6
2-23-51	8	8
3-2-51	5	5
		<hr/> 50

Backcross (F<sub>1</sub> [S♀ + R♂] × S♂)

✓ 2-15-51	6	5
2-22-51	8	6

F<sub>2</sub> mice

R♀ + S♂	2-24-51	- 6	4	
	2-28-51	- 8	2	
	2-24-51	- 11	3	
	2-14-51	- 9	9	
	2-14-51	- 7	1	
	2-10-51	- 8	6	
	2-9-51	- 4	3	
	2-4-51	- 5	4	
	S♀ + R♂	2-20-51	- 7	6
		2-27-51	- 7	4
2-12-51		- 4	4	

F<sub>2</sub> ♀ + S ♂

3/22/50

3/1/51  
3/5  
3/8  
3/14  
3/17  
3/19

-  
-  
-  
-  
-

3  
10  
9  
7  
11  
10

3  
10  
9  
7  
11  
10

