ANOPHELES GAMBIAE COMPLEX

Parent Strains.

Species	% hatch	% adults from eggs	% adults from larvae	% ♂♂	No. of adults
A	52.3	42.1	71.9	49.2	933
B	30.3	24.1	79.6	47.9	331
merus	58.9	54.6	73.8	48.5	562

Crosses.

Female	x	Male	% adult ♂♂	No. of adults
B		A	47.9	742
A		B	44.9	1330
C		A	93.5	655
A		C	37.2	671
C		B	80.5	82
B		C	49.2	65
merus		C	48.4	185
C		merus	38.4	190
merus		A	82.0	802
A		merus	35.3	893
merus		B	100.0	156
B		merus	38.4	237

Egg measurements.

Species	n	$\bar{x}$	Range in mm.	S	$S\bar{x}$
A (Kisumu)	199	0.483	0.429-0.525	0.0181	0.0013
A (Muheza)	100	0.490	0.397-0.531	0.0252	0.00252
B (Tinonganine)	100	0.487	0.442-0.544	0.0205	0.0020
C (Balegane)	100	0.474	0.435-0.518	0.0161	0.0016
merus (Tanga)	200	0.566	0.512-0.634	0.0244	0.00173
merus (L'Isle d'Ambre Mauritius)	45	0.562	0.525-0.614	0.019	0.0020
merus (Pt. aux Piments Mauritius)	90	0.566	0.525-0.634	0.020	0.00298
merus (Big Bend Swaziland)	50	0.546	0.512-0.582	0.0160	0.00227
merus♀ (Tanga) x A♂ (Kisumu) F_1	100	0.545	0.435-0.589	0.0234	0.00234
A♀ (Kisumu) x merus♂ (Tanga) F_1	100	0.493	0.454-0.535	0.017	0.0017
merus♀ (Tanga) x A♂ (Diggi) F_1	50	0.544	0.493-0.595	0.0231	0.00329
A♀ (Diggi) x merus♂ (Tanga) F_1	50	0.508	0.461-0.557	0.0213	0.00302

(For publication S & $S\bar{x}$ should be corrected to 3 decimal places.)

Salinity tolerance tests.

100% salt water = 31.7 g./litre NaCl. Temp. 80 F.

Kisumu A	salinity	45%	50%	53%	55%	57%
	mortality (2 hours)	3/25	6/25	11/25	19/25	24/25

LC_{50} = 52.5% S.W.

Kisumu A	salinity	40%	50%	55%	60%
	mortality (2 hours)	2/25	0/25	15/25	22/25

LC_{50} = 52.9% S.W.

Big Bend merus	salinity	100%	110%	115%	125%
	mortality (3 hours)	3/19	4/19	6/19	14/19

LC_{50} = 121.3% S.W

Big Bend merus	salinity	115%	120%	130%	140%
	mortality (2 hours)	4/20	14/20	10/20	14/20

LC_{50} = 124.5% S.W.

Big Bend merus	salinity	115%	120%	130%	140%
	mortality (2 hours)	1/20	5/20	7/20	11/19
	mortality (3 hours)	9/20	12/20	17/20	18/20

LC_{50} (2 hrs) = 137.4% S.W.

LC_{50} (3 hrs) = 116.9% S.W.

Tanga *merus*	salinity	100%	110%	115%	120%	
	mortality (2 hours)	9/25	15/25	24/25	21/25	

LC_{50} = 104.3% S.W.

Tanga *merus*	salinity	60%	70%	80%	90%	100%	120%
	mortality (2 hours)	3/25	0/25	0/25	2/25	6/25	16/25

LC_{50} = 113% S.W.

Tinongamine B	salinity	30%	35%	40%	45%
	mortality (2 hours)	0/17	1/17	5/17	13/17

LC_{50} = 41.7% S.W.

F_1 of A (Diggi) ♀ x *merus* (Tanga) ♂	salinity	60%	70%	80%	85%	90%
	mortality (2 hours)	6/12	11/12	12/12	12/12	12/12

salinity	55%	60%	65%	70%
mortality (2 hours)	3/20	5/20	7/20	14/20

combined LC_{50} = 64.4% S.W.

F_1 of *merus* (Tanga) ♀ x A (Diggi) ♂	salinity	60%	70%	80%	85%	90%
	mortality (2 hours)	1/12	5/12	11/12	12/12	12/12

salinity	60%	70%	75%
mortality (2 hours)	5/12	10/12	11/12

combined LC_{50} = 66.7% S.W.