



FORMS for RECORDING QUALITY CONTROL DATA



7. Forms for Recording Quality Control Data

The following section presents forms commonly used in the recording of quality control data for fruit flies. They can be used as they are presented or as templates for other forms developed for specific tests or facilities.

7.1. PUPAL SIZE ASSESSMENT FORM

Set-up Date: _____

- Pre Irradiation
- Post Irradiation
- Pre Release
- Post Release

Shipment Date	Lot #	Collection Date	Test Date	Tester

Replicate						Sum
1	2	3	4	5		
Total Pupae						
Total Weight						

Replicate						Sum
6	7	8	9	10		
Total Pupae						
Total Weight						

Calculations:

		Value
$\left\{ \frac{\sum_1^5 \text{Replicates}}{\sum_1^5 \text{Total Pupae}} \right\}$	Average Weight (5 samples)	
		Value
$\left\{ \frac{\sum_1^{10} \text{Replicates}}{\sum_1^{10} \text{Total Pupae}} \right\}$	Average Weight (10 samples)	

Observations: _____

Authorization: _____

7.2. EMERGENCE AND FLIGHT ABILITY ASSESSMENT FORM

Set-up Date: _____

	Shipment Date	Lot #	Collection Date	Test Date	Tester
<input type="checkbox"/> Pre Irradiation					
<input type="checkbox"/> Post Irradiation					
<input type="checkbox"/> Pre Release					
<input type="checkbox"/> Post Release					

<i>Elements</i>		Replicate					Average
		1	2	3	4	5	
T	Number of Pupae						
A	Not Emerged						
B	Part Emerged						
C	Deformed						
D	Not Fliers						

Calculations:

			Value
E	$T - \{A + B\} / 100$	% Emergence	
F	$T - \{A + B + C + D\} / 100$	% Fliers	
	F/E	Rate of Fliers	

Observations: _____

Authorization: _____

7.3. STRESS ASSESSMENT FORM

Set-up Date: _____

- Pre Irradiation
- Post Irradiation
- Pre Release
- Post Release

Shipment Date	Lot #	Collection Date	Test Date	Test Time	Tester

Elements		Replicate					Average
		1	2	3	4	5	
T	Total Males						
DM	Dead at 48 hours						
DF	Total Females						
A	Dead at 48 hours						

Calculations:

		Value
$\left\{ \frac{DM}{100} \right\}$	% Male Mortality	
$\left\{ \frac{DF}{100} \right\}$	% Female Mortality	

Observations: _____

Authorization: _____

7.4. SEX RATIO ASSESSMENT FORM

Set-up Date: _____

- Pre Irradiation
- Post Irradiation
- Pre Release
- Post Release

Shipment Date	Lot #	Collection Date	Test Date	Tester

Elements		Replicate					Average
		1	2	3	4	5	
T	Total Pupae						
M	Male						
F	Female						
A	Not Emerged						
B	Part Emerged						

Calculations:

		Value
$\left\{ \frac{M}{M+F} \right\} \times 100$	% Male	

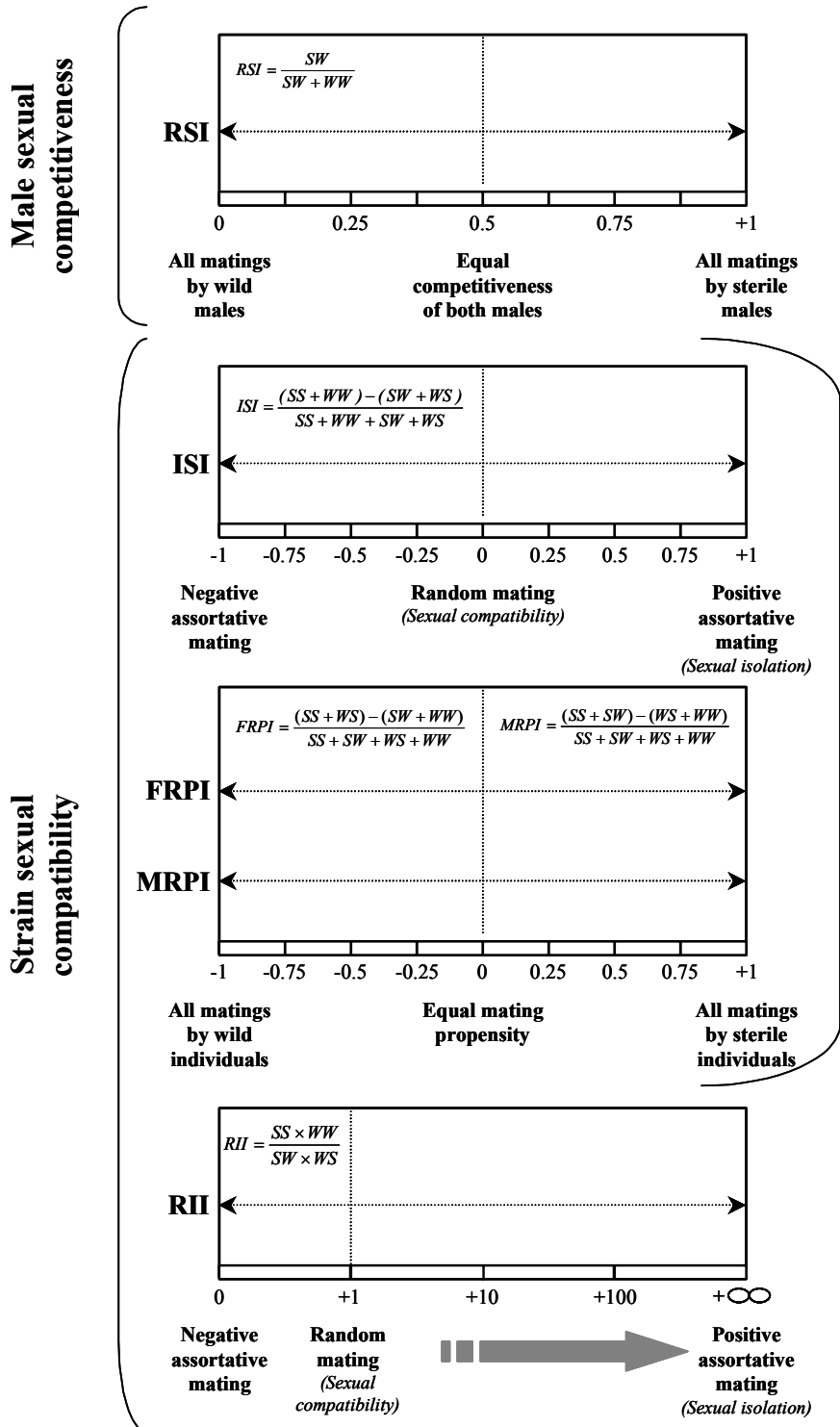
Observations: _____

Authorization: _____

7.6. GRAPHIC REPRESENTATION OF INDICES OF MATING PERFORMANCE

The following graphic form is recommended to represent the values of mating performance indices obtained from mating performance field cage test in a relatively self-explanatory way.

While RSI measures the male sexual competitiveness, the ISI (with FRPI and MRPI) and the RII provides two measurements of the sexual compatibility (or isolation) between two strains (see 3.1 MATING PERFORMANCE FIELD CAGE TEST for details). It is to be noted, that ISI, FRPI and MRPI should always be interpreted and presented together since their meaning is complementary. Data should be plotted in each graph as mean ± standard deviation (see examples in 3.1 MATING PERFORMANCE FIELD CAGE TEST).



7.7. DATASHEET FOR SHIPMENT OF STERILE PUPAE

A copy of this datasheet should be present within each box of the consignment.

Name and address of the facility (origin):	Name and address of the recipient:
.....
.....
.....
.....

Consignment General Information	
Irradiation date: _____	Irradiation dose (Gy): _____
Packing date: _____	Shipping date: _____
Total No of boxes: _____	Total weight (kg): _____

	Box Number within the Consignment											
	1	2	3	4	5	6	7	8	9	10		
Number of pupae containers inside the box ¹²											<i>a</i>	
Weight (kg)											<i>b</i>	
Number of pupae containers with radiation sensitive indicator											<i>c</i>	
Number of indicators that were exposed to the recommended dose ¹³											<i>d</i>	
Number of indicators countersigned at the origin, after irradiation											<i>e</i>	

Observations: _____

Authorization: _____

- (a) Ideally $a=c=d=e$
- (b) This value should be equal to the total weight reported under "General Information"
- (d) Should it differ from value in (a), the consignment should be disposed safely and not used

¹² Plastic bags, "sausages" or other
¹³ "Visual determination"