

**FOURTH FAO/IAEA RESEARCH CO-ORDINATION MEETINGS ON
“DEVELOPMENT OF MASS-REARING FOR NEW WORLD (*Anastrepha*)
AND ASIAN (*Bactrocera*) FRUIT FLIES IN SUPPORT OF SIT”**

and

**“IMPROVING STERILE MALE PERFORMANCE IN FRUIT FLY SIT
PROGRAMMES”**

**Agricultural Services, Entomology Division
Ministry of Agro Industry, Food Production & Security of Mauritius**

21-25 September 2009, Casa Florida, Péreybère, Mauritius

DRAFT AGENDA

MONDAY, 21 SEPTEMBER 2009	
08:00-08:20	S. (Krish) Permalloo, A. Jessup and J. Hendrichs: Welcome and programmatic and administrative issues
	<i>SESSION I Chairperson: A. Jessup Mass rearing of olive fly</i>
08:20-08:40	P. Sacchetti, B. Ghiardi, A. Granchietti, F.M. Stefanini and A. Belcari: Probiotic diets may affect egg production and longevity of the Olive Fly, <i>Bactrocera oleae</i>
08:40-09:00	I. Dimou, P. Rempoulakis, A. Chrysargyris and <u>A.P. Economopoulos</u>: Improving olive fly adult and larval artificial diets, microflora associated with the fly, and evaluation of a transgenic olive fly strain
09:00-09:20	<u>A. M. Estes</u>, D.F. Segura, A. Jessup and E.A. Pierson: Does the presence of <i>Candidatus Erwinia dacicola</i> hasten mating initiation in wild and laboratory <i>Bactrocera oleae</i> ?
09:20-09:40	Discussion of presentations
	<i>SESSION II Chairperson: J. Rull Mass rearing of <i>Dacus ciliatus</i>, <i>Bactrocera invadens</i> and <i>Ceratitis</i> spp.</i>
09:40-10:00	<u>D. Nestel</u> and E. Nemny-Lavy: Sucrose-protein hydrolysate ratios in adult food and its effects upon <i>Dacus ciliatus</i> reproductive performance, survival and protein contents
10:00-10:20	COFFEE BREAK

10:20-10:40	S. Ekesi, F.M. Khamis, A. Malacrida, S.A. Mohamed, P.W. Nderitu and J. Kiilu: Development and improvement of rearing techniques for <i>Bactrocera invadens</i> and four <i>Ceratitis</i> species of economic importance in Africa
10:40-11:00	C.L. Chang, F. Afuola and Q. X. Li: Canola, corn, and vegetable oils as alternative supplements of wheat germ oil in fruit fly liquid larval diet C.L. Chang, S. McCombs, E. Jang and R. Vargas: Assessment of fruit fly liquid larval diet technology transfer to the medfly mass rearing facilities worldwide
11:00-11:20	Discussion of presentations
	<i>SESSION III Chairperson: A. Economopoulos</i> <i>Mass rearing of Anastrepha spp.</i>
11:20-11:40	E. Hernández, D. Orozco Dávila, T. Artiaga-López, M.R. Hernández and J.P. Rivera: Improving mass-rearing methods and process automation for <i>Anastrepha obliqua</i> and other species of economic importance in Mexico
11:40-12:00	R. Braga-Sobrinho, J.A. Guimarães, A.L.M. Mesquita and K.L.B. Araújo: Development of mass rearing techniques for fruit flies of the Genus <i>Anastrepha</i> (Diptera:Tephritidae)
12:00-13:00	LUNCH
13:00-13:20	J. Rull and J. Arredondo: Sterility induction of <i>Anastrepha ludens</i> irradiated at different doses
13:20-13:40	M. Utgés, M. de la Vega, M. Mendoza, A. Oviedo, S. Abraham, M.T. Vera and J.C. Vilardi: Analysis of dispersal and survival of adult <i>Anastrepha fraterculus</i> fed on different adult diets
13:40-14:00	A. Oviedo, S. Abraham, E., Willink, D. Nestel, C.L. Chang, N. Papadopoulos and M.T. Vera: Studies on the nutritional biology of <i>Anastrepha fraterculus</i> for the development of artificial rearing protocols
14:00-14:20	J.M.M. Walder, M.L.Z. Costa, B.J. Paranhos, K. Costa, L.D. Alcarde, T.A. Mastrangelo, A.C. Kamiya, L.A. Lopes and L.G. Paranhos: Laboratory colonization process for <i>Anastrepha</i> sp. 1 <i>aff. fraterculus</i> and <i>A. obliqua</i> and their parasitoid <i>D. longicaudata</i> for future SIT AW-IPM in Brazil
14:20-14:40	Discussion of presentations

	<i>SESSION IV Chairperson: J.C. Vilardi</i> <i>Mass rearing of Bactrocera spp.</i>
14:40-15:00	P. Sookar, M. Alleck and S. Permalloo: Assessment of artificial larval diets for <i>B. cucurbitae</i> and <i>B. zonata</i> (Diptera: Tephritidae)
15:00-15:20	COFFEE BREAK
15:20-15:40	A.S. Gilchrist and A.W.M. Meats: The genetics and mass-rearing in <i>Bactrocera tryoni</i>
15:40-16:00	K. Le Duc, T.H. Nguyen, T.T. Vu and S. Vijay: Development of rearing techniques for <i>Bactrocera pyrifoliae</i> in Vietnam
16:00-16:20	S. Resilva, G.B. Obra and C.L. Chang: The suitability of liquid diet in rearing oriental fruit fly, <i>Bactrocera philippinensis</i> (Diptera: Tephritidae)
16:20-16:40	S.M.M. Shah, N. Ahmad and N.H. Khuhro: Exploitation of nuclear techniques for the development of biological control to manage <i>Bactrocera zonata</i> fruit flies
16:40-17:00	M. Khan, M.A. Hossain, M.A. Wadud, M.A. Alim, S.A. Khan and M.S. Islam: Management of <i>Bactrocera cucurbitae</i> infesting extensive cucurbit growing areas of Bangladesh using the SIT
17:00-17:20	L.D. Galanihe: Studies on the local diet preparations for mass rearing of melon fly, <i>Bactrocera cucurbitae</i>
17:20-17:40	Discussion of presentations
TUESDAY, 22 SEPTEMBER 2009	
	<i>SESSION V Chairperson: D. McInnis</i> <i>Hormonal treatments</i>
08:00-08:20	D.F. Segura, M.C. Liendo, F. Devescovi, M.E. Utgés, P.A. Peralta, G. Bachmann, L.Z. Carabajal-Paladino, S. Abraham, V. Yusef, P. Gómez-Cendra, M.C. Giardini, F.H. Milla, J.P. Bouvet, S.B. Lanzavecchia, M. Hojak, M. Juri, C. Conte, A. Parreño, M.T. Vera and J.L. Cladera: Sexual competitiveness of sterile JH-treated protein-fed <i>Anastrepha fraterculus</i> males and females
08:20-08:40	Y. Gómez-Simuta: Development and evaluation of methods for incorporating juvenile Hormone into the adult diet to

	enhance the SIT effectiveness
8:40-09:00	I. Ul Haq, C. Cáceres, J. Hendrichs, P. Teal and A.S. Robinson: Effect of juvenile hormone analogue and dietary protein on male <i>Bactrocera cucurbitae</i> (Diptera: Tephritidae) sexual behaviour
09:00-09:20	BREAK
09.20-10.00 (see separate official programme brochure)	OFFICIAL OPENING S. I. Seewooruthun – Ag. Chief Agricultural Officer: Master of Ceremony: S. Permalloo - Division of Entomology: Welcome address J. Hendrichs - FAO/IAEA: Fruit fly coordinated research projects and goals of research coordination meetings Hon. S. V. Faugoo - Minister of Agro Industry, Food Production & Security: Official Opening
10:00-10:20	COFFEE BREAK
10:20-10:40	P.E.A. Teal: Methyl farnesoate, a naturally occurring juvenoid that accelerates reproductive development in Caribbean fruit flies
10:40-11:00	Discussion of presentations
	SESSION VI Chairperson: P. Teal <i>Post-teneral feeding</i>
11:00-11:20	P. Sookar, M. Alleck and S. Permalloo: Improving male reproductive performance of <i>Bactrocera zonata</i> and <i>Bactrocera cucurbitae</i> (Diptera: Tephritidae)
11:20-11:40	S. Abraham, M.C. Liendo, F. Devescovi, D.F. Segura, J.L. Cladera, E. Willink and M.T. Vera: Effect on female remating behaviour of post-teneral treatment to improve sterile male mating competitiveness
11:40-12:00	P. Liedo, D. Orozco, L. Cruz-López, J.L. Quintero, C. Becerra-Pérez, A. Oropeza, M. R. Hernández and J. Toledo: Optimization of sugar: yeast ratio in post-teneral diet to improve survival and mating performance of sterile <i>Anastrepha</i> fruit flies
12:00-13:00	LUNCH
13:00-13:20	M.T. Vera, M.J. Ruíz, A. Oviedo, S. Abraham, M. Mendoza, D.F. Segura, N.A. Kouloussis and E. Willink: Fruit compounds affect male sexual competitiveness in the South American fruit fly, <i>Anastrepha fraterculus</i> (Diptera:

	Tephritidae)
13:20-13:40	B. Yuval, M.B. Ben-Yosef, E. Ben-Ami, A. Behar and E. Jurkevitch: The medfly and its bacteria – potential for enhancing SIT operations
13:40-14:00	P.W. Taylor, C.W. Weldon, D. Pérez-Staples, S.R. Collins, B. Fanson and C. Smallridge: Post-teneral nutrition as an influence on reproduction, sexual performance and longevity of Queensland fruit flies
14:00-14:20	N. Silva, L. Dantas, R. Calisto and M. Faria: Improving an adult holding system and enhancing sterile Mediterranean fruit fly <i>Ceratitis capitata</i> male performance by using aromatherapy and a protein supplement
14:20-14:40	Discussion of presentations
	<i>SESSION VII Chairperson: B. Yuval</i> <i>Semiochemicals</i>
14:40-15:00	N. Kouloussis, B. Katsoyannos and N. Papadopoulos: Mating competitiveness, calling and longevity in sterile <i>Ceratitis capitata</i> males following exposure to various citrus compounds
15:00-15:20	G. Obra and S. Resilva: Improvement of sterile male performance of <i>Bactrocera philippinensis</i>
15:20-15:40	COFFEE BREAK
15:40-16:00	B.J. Paranhos, D. McInnis, R. Morelli, R. Castro, L. Garziera, L.G. Paranhos, K. Costa, C. Gava, M.L.Z. Costa and J.M.M. Walder: Optimum dose of ginger root oil to treat sterile medfly males (Diptera: Tephritidae)
16:00-16:20	W. Orankanok, S. Chinvinijkul and S. Pinkeaw: Leverage of pre-release diet and methyl eugenol on mating percentage and field distribution of young sterile fruit flies, <i>Bactrocera dorsalis</i> (Hendel) and <i>B. correcta</i> (Bezzi)
16:20-16:40	S. Quilici and C. Schmitt: Influence of zingerone on the mating success of males in the melon fly, <i>Bactrocera cucurbitae</i> (Coquillett)
16:40-17:00	Q. Ji: Effects of larvae fed methyl eugenol and sterile males fed methyl eugenol
17:00-17:20	B. Sabater-Muñoz, M.A. Juan-Blasco, V. San Andrés, R. Argilés, M.A. Utrillas, I. Pla, A. Urbaneja and P.

	Castañera: Effect of aromatherapy and post teneral diet on sterile Mediterranean fruit fly males' mating success
17:20-17:40	Discussion of presentations
WEDNESDAY, 23 SEPTEMBER 2009	
	<i>SESSION VII Chairperson: P. Liedo</i> <i>Release methods</i>
08:00-08:20	M. Bjeliš, D. Radunić, I. Rakuljić and P. Bulić: Pre – and post – release control of sterile medfly males quality released by automated ground release machine
08:20-08:40	B. Woods, E. Steiner, T. Black, J. Lindsey, I. Lacey and R. Fogliani: Potential for increased uptake of SIT in Western Australia through improved emergence, shipment and release systems
08:40-09:00	L.T. Tan and K.H. Tan: Aerial release methods for SIT
09:00-09:20	B. Barnes: Improving the environmental conditions for sterile male Mediterranean fruit flies in holding containers prior to ground releases in a Sterile Insect Technique programme
09:20-09:40	D.O. McInnis, B.J. Paranhos and T.E. Shelly: Relative survival of sterile medflies, <i>Ceratitis capitata</i> , in large field cages when released at 2 days vs. 5 days old
09:40-10:00	Discussion of Presentations
10:00-10:30	COFFEE BREAK Move to separate rooms
	<i>SESSION VIII</i> <i>SEPARATE AND PARALLEL SESSIONS OF BOTH RCMs</i> <i>Respective Chairpersons: A. Jessup and J. Hendrichs</i> <i>Also “THE INDIAN OCEAN FRUIT FLY MEETING”</i> <i>(Comoros, Madagascar, Mauritius, Reunion and Seychelles)</i> <i>Chairperson: R. Pereira, separate agenda</i>
10:30-12:00	Discussion in working groups – achievement of CRP outputs and accomplishment of specific objectives in the different thematic areas
12:00-13:00	LUNCH

13:00-15:00	Working groups –preparation of final report on achievement of CRP outputs and accomplishment of specific objectives in the different thematic areas
15:00-15:20	COFFEE BREAK
15:20-17:00	Working groups – continued preparation of final report on achievement of CRP outputs and accomplishment of specific objectives in the different thematic areas
17:00-18:30	General Discussion – presentation by group leaders and review of achievement of CRP outputs and accomplishment of specific objectives in the different thematic areas
THURSDAY, 24 SEPTEMBER 2009	
08:00-10:00	Working groups – preparation of CRP evaluation report
10:00-10:20	COFFEE BREAK
10:20-12:00	Working groups – preparation of CRP evaluation report
12:00-13:00	LUNCH
13:00-15:00	Compilation of CRP evaluation report
15:00-15:20	COFFEE BREAK
15:20-18:00	General Discussion – presentation and review of CRP evaluation report
FRIDAY, 25 SEPTEMBER 2009	
08:00-10:00	Group Leaders and reviewers – editing of draft manuscripts, discussion with authors and feedback on required changes
10:00-10:20	COFFEE BREAK
10:20-12:00	Group Leaders and reviewers – editing of draft manuscripts, discussion with authors and feedback on required changes
12:00-13:00	LUNCH
13:00-15:00	Group Leaders and reviewers – editing of draft manuscripts, discussion with authors and feedback on required changes
15:00-15:20	COFFEE BREAK
15:20-16:00	Concluding remarks and closing of meetings

