



Partnership To End Malaria



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To End Malaria

3 February 2020

New Tools, New Challenges in Vector Control

15th VCWG Meeting

Allison Tatarsky and Sheila Ogoma

Agenda (1/2)

Time	Presentation	Presenter
14:30 – 14:40	Welcome and work plan updates	Allison Tatarsky Sheila Ogoma
14:40 – 14:45	Work plan update on associating morphological and molecular ID	Seth Irish
Control tools		
14:45 – 14:55	Transgenic insect-killing fungi for versatile mosquito control	Etienne Bilgo Abdoulaye Diabate Brian Lovett
14:55 – 15:05	Electronic Mosquito Barriers: a non-chemical insect repelling technology using electric fields	Krijn Paaijmans
15:05 – 15:15	MAIA repellent ointment: leveraging existing daily habits of families to protect them from malaria	Franck Langevin
15:25 – 15:35	In2Care EaveTubes as new tool to control insecticide-resistant malaria vectors	Marit Farenhorst
15:35 – 16:00	Panel discussion with presenters (Q&A)	All
16:00 – 16:30	Afternoon break / fair-trade coffee, selection of teas, fruit juices, snacks Networking	

Agenda (2/2)

Surveillance tools		
16:30 – 16:40	New tools addressing quality assurance in vector control	Michael Coleman
16:40 – 16:45	Q&A	All
Digital tools for vector control tracking and decision making		
16:45 – 16:55	MESA Track: a malaria research mapping platform	Maria Tusell
16:55 – 17:05	Strategic information applied to vector control: Digital tools for entomological surveillance and vector control monitoring	Lucia Fernandez
17:05 – 17:15	Panel discussion with presenters (Q&A)	All
Future work stream priorities		
17:15 – 17:50	Discussion on work plan priorities, including new tools roadmaps	Allison Tatarsky Sheila Ogoma
17:50 – 18:00	Wrap up	Allison Tatarsky Sheila Ogoma

Workplan updates (1/4)

Project #1: Identification of *Anopheles* vectors

Activity #1: Associating molecular and morphological identification – Seth Irish and Neil Lobo

Activity #2: Update of sub-Saharan African keys – Maureen Coetzee

...brief update from Seth on both activities coming up next

Workplan updates (2/4)

Project #2: Develop draft guidelines for measuring residual malaria transmission and its drivers – April Monroe and Fredros Okumu

- A set of standardized indicators and procedures for assessing residual malaria transmission have been developed
- A manuscript is under review and several of the indicators have been incorporated into the UCSF Malaria Elimination Initiative's Entomological Surveillance Planning Tool (ESPT)
- Studies have also published on this topic, for example:

Monroe, A., S. Moore, et al. (2019). "Measuring and characterizing night time human behaviour as it relates to residual malaria transmission in sub-Saharan Africa: a review of the published literature." *Malaria Journal* 18(1): 6.

Finda, M. F., I. R. Moshi, et al. (2019). "Linking human behaviours and malaria vector biting risk in south-eastern Tanzania." *PloS one* 14(6): e0217414.

Workplan updates (3/4)

Project #3: Vector control tool and roadmap tracking

Activity #1: Development of a vector control tool inventory – Allison Tatarsky

Category	Indoor/ Outdoor	Product type	Insecticide class / add'l specs	Product name	Company	Insecticide/agent	End user	Date of PQ	Status
Biological control	Outdoor	Aquatic creatures	Fish	N/A	N/A	N/A	Various	N/A	N/A
Biological control	Outdoor	Aquatic creatures	Frogs	N/A	N/A	N/A	Various	N/A	N/A
Biological control	Outdoor	Larvicide	IGR	MOZKILL 120 SC	Dow AgroSciences LLC	Spinosad	Professional	21/02/2018	PQ
Biological control	Outdoor	Larvicide	IGR	RELEASE GR	Clarke Mosquito Control Products, Inc.	Spinosad	Professional	23/03/2018	PQ
Biological control	Outdoor	Larvicide	IGR	Spinosad 0.5% GR	Clarke Mosquito Control Products, Inc.	Spinosad	Professional	28/02/2018	PQ
Biological control	Outdoor	Larvicide	IGR	Spinosad 20.6% EC	Clarke Mosquito Control Products, Inc.	Spinosad	Professional	28/02/2018	PQ
Biological control	Outdoor	Larvicide	IGR	Spinosad 7.48% DT	Clarke Mosquito Control Products, Inc.	Spinosad	Professional	28/02/2018	PQ
Biological control	Outdoor	Larvicide	IGR	Spinosad Monolayer DT	Clarke Mosquito Control Products, Inc.	Spinosad	Professional	28/02/2018	PQ
Biological control	Outdoor	Larvicide	Microbial	VectoBac GR	Valent BioSciences LLC	Bacillus thuringiensis subsp. israelensis	Professional	19/02/2018	PQ
Biological control	Outdoor	Larvicide	Microbial	VectoBac WG	Valent BioSciences LLC	Bacillus thuringiensis subsp. israelensis	Professional	13/03/2018	PQ
Biological control	Outdoor	Larvicide	Microbial	VectoMax FG	Valent BioSciences LLC	Bacillus thuringiensis subsp. israelensis + Bacillus	Professional	13/03/2018	PQ
Insecticides	Outdoor	Aerial spraying	Various	Various	Various	Various	Professional, public health		
Insecticides	Outdoor	Attract and kill	ATSB	Menus 3.0	Clarke Mosquito Control Products, Inc.	Pyrethrins	Professional		
Insecticides	Outdoor	Attract and kill	ATSB	AllClear Mosquito Bait & Kill	Terminix (Westham)	Microencapsulated garlic oil	Consumer	N/A	EPA exempt
Insecticides	Outdoor	Attract and kill	ATSB	ATSB Spray	Terminix (Westham)	Microencapsulated garlic oil	Consumer	N/A	EPA exempt
Insecticides	Outdoor	Attract and kill	ATSB	JennyPro Bait Station	Westham	Microencapsulated garlic oil	Consumer		
Insecticides	Outdoor	Autodissemination	IGR & JHA	Various	Various	Pyriproxyfen			
Insecticides	Outdoor	Bite prevention	Wearables	OFF! Clip-ON	SC Johnson & Son, Inc	Metofluthrin	Consumer		
Insecticides	Outdoor	Bite prevention	Wearables	OFF! Clip-ON	SC Johnson & Son, Inc	Metofluthrin	Consumer	N/A	N/A
Insecticides	Indoor	Durable wall linings	Pyrethroid	ZeroVector	Vestergaard	Deltamethrin	Public health		
Insecticides	Indoor	Household	Aerosol	Various (Raid, Baygon, All Out)	SC Johnson & Son, Inc	Transfluthrin + Cyfluthrin	Consumer	N/A	N/A
Insecticides	Indoor	Household	Aerosol	Various (Raid, Baygon, All Out)	SC Johnson & Son, Inc	Transfluthrin + Cypermethrin + Prallethrin	Consumer	N/A	N/A
Insecticides	Indoor	Household	Long-lasting aerosol	X Mos	Sumitomo Chemical Co., Ltd.	Metofluthrin	Consumer		
Insecticides	Indoor	Household	Vaporisers	Various	Various		Consumer		
Insecticides	Indoor	Household	Emanators	Various	Various		Consumer		
Insecticides	Indoor	Household	Coils	Various	Various		Consumer		
Insecticides	Indoor	Insecticide treated paint	Pyrethroid	Inesfly 5A IGR NG	Inesfly	Alpha-cypermethrin, allethrin, pyriproxyfen	Consumer, public health		
Insecticides	Indoor	Insecticide treated paint	Organophosphate + IGR	Inesfly 5A IGR TM	Inesfly	Chlorpyrifos, diazinon, pyriproxyfen	Consumer, public health		
Insecticides	Indoor	Insecticide treated paint	Carbamate	Inesfly Paint	Inesfly	Propoxur	Consumer, public health		
Insecticides	Indoor	Insecticide treated paint	Organophosphate + IGR	Inesfly 5D IGR	Inesfly	Diazinon, pyriproxyfen	Consumer, public health		
Insecticides	Indoor	Insecticide treated paint	Pyrethroid	Kansai Anti-Mosquito Paint	Kansai Paint Group		Consumer, public health	18/4/2018	EPA
Insecticides	Indoor	IRS	Pyrethroid	Fendona 5 WP	BASF	Alpha-cypermethrin	Public health	08/12/2017	PQ
Insecticides	Indoor	IRS	Carbamate	Ficam	Bayer S. A. S.	Bendiocarb	Public health	18/04/2018	PQ
Insecticides	Indoor	IRS	Pyrethroid + neonicotinoid	Fludora Fusion	Bayer S. A. S.	Deltamethrin + clothianidin	Public health	13/12/2018	PQ

Workplan updates (4/4)

Project #3: Vector control tool and roadmap tracking

Activity #2: Vector control paradigm roadmap tracking – NTNC Co-Chairs

...for discussion later in the session



The VCWG NTNC workstream led a joint symposium with IVCC at the PAMCA conference in September 2019



Thank you, find out more
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Discussion on future workplan activities (1/4)

Idea #1: Live and accessible vector control tool inventory

- Coordination and communication with product developers, researchers, etc.
- Ongoing updates to inventory to maintain relevance
- Accessible platform

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Discussion on future workplan activities (2/4)

Idea #2: Collaboration with the ARMPC and SCPC around innovation messaging and roundtables

- Cross-fertilization with NTNC workstream and presentations at VCWG meetings
- Advocacy and communications material made available to NTNC workstream members

Discussion on future workplan activities (3/4)

Idea #3: Tracking roadmaps for new tools/paradigms:

- Use cases
- TPP
- Products
- Ongoing/planned research
- Status in regulatory and policy pathways
- Access

Would need FTE and funding; collated and presented at VCWG meetings and on existing platform?

Ivermectin added to workplan?

Discussion on future workplan activities (4/4)

Other ideas for the workplan?

- Workplan **projects** are themes identified as priorities by the NTNC workstream
- Workplan **activities** are often ongoing activities led by partners who agree to contribute to the workplan

Vector control

Vector surveillance

More NMCP participation and information exchange



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