Supplementary Material

Supplementary Table 1: List of ongoing SIT projects against mosquitoes. Updated from Tables 4 and 5 from [1]. This list is not exhaustive: all projects where no updates were found online in February 2024 were removed from the list.

Country	City	Approach	Size of release area (ha)	Inhabitants in the release area	Average release density (/ha/w)	Current status & perspectives	Species	Phase in 2024	Source
Albania	Tirana	SIT	12	NA	NA	MRR in 2018 completed with sterile males from the local strain produced in Italy (CAA). Development of local production of sterile males ongoing.	*Ae. albopictus*	I	[2]
Bangladesh	Dhaka	SIT	NA	NA	NA	Evaluation of mass-rearing and irradiation procedures in the lab.	*Ae. aegypti*	I	[3]
Brazil	Recife	SIT	56	18300	5000	MRR in Carnaiba in 2018 to test drone release. 19% suppression in the wild mosquito population in Recife. Project ongoing to upscale and measure epidemiological impact on Fernando de Noronha island.	*Ae. aegypti*	II	https://www.iaea.org/newscenter/news/nuclear-science-to-control-mosquitoes-generate-clean-energy-a-key-focus-of-director-general-grossis-visit-to-brazil [4, 5]
Burkina Faso	Bobo Dioulasso	SIT	NA	NA	NA	Baseline data collection for 3 years. Building and equipment of a mass-rearing facility.	*Ae. aegypti*	I	R. Dabire, pers. com.
China	Guangzhou	SIT	1.2	4750	166666	No induced sterility but 40% reduction of female density in BG traps and 80% in Human Landing Catch due to male mating harassment.	*Ae. albopictus*	II	[6]
China	Guangzhou	IIT / SIT	35	2215	100000	Field pilot trial completed (>99% suppression of females) and pre-operational trials ongoing for cost reduction, with commercial activity by Guangzhou Wolbaki Biotech Co. Ltd.	*Ae. albopictus*	III	[7]
Croatia	Premantura	SIT	30	NA	2000	Field pilot completed with sterile males from an Italian strain produced in Italy (CAA). 60% induced sterility and 45% suppression of adults.	*Ae. albopictus*	II	https://www.rfi.fr/en/science-environment/20230720-croatia-targets-latest-climate-change-threat-mosquitoes G. Vignjević, pers. com.
Cuba	La Habana	SIT	50	NA	1270	100% suppression of egg densities in the pilot area. RTC planned in La Habana to measure epidemiological impact.	*Ae. aegypti*	II	[8] [9]
Cyprus	Kiti	SIT	50	NA	2000	Elimination trial ongoing. Sterile males produced by FAO-IAEA, Austria. No information available on the results.	*Ae. aegypti*	II	[10] https://www.iaea.org/newscenter/pressreleases/nuclear-technique-used-in-europe-for-first-time-to-battle-yellow-fever-mosquito-found-in-cyprus

Ecuador	Galapagos	SIT	NA	NA	NA	Small insectary, rearing local strain, irradiation capacity, trapping & monitoring field sites in progress.	*Ae. aegypti*	I	https://www.geneconvenevi.org/articles/galapagos-to-receive-male-mosquitoes-for-vector-control-in-ecuador/
France	French Polynesia	SIT	NA	NA	NA	BLDC. Building of mass-rearing facility, purchase of irradiator. Plan of a pilot trial to measure entomological and epidemiological impacts.	*Ae. aegypti*	I	[11]
France	Montpellier	SIT	10	NA	NA	MRR to test drone release of sterile males with sterile males from a local strain produced in Italy (CAA). Perspective of upscale by Terratis.	*Ae. albopictus*	I	https://www.eid-med.org/projet-tis/ https://terratis.fr/
France	Reunion Island	SIT	32	NA	3000	Pilot trial completed, 50% induced sterility. Shift to boosted SIT (phase 3) planned in 2024.	*Ae. albopictus*	II	https://www.ird.fr/la-technique-de-linsecte-sterile-reduit-de-50-la-fertilite-des-moustiques-aedes-albopictus-duparc [12, 13]
France	Reunion Island	Boosted SIT	10	171 households	353	Pilot trial completed, 90% reduction of the target species, 60% reduction of *Ae. albopictus*. Phase 3 planned in 2024. Perspective of upscale by MoSITouch.	*Ae. aegypti*	II	https://www.cirad.fr/espace-presse/communiques-de-presse/2021/tis-renforcee-moustique-reunion [14] https://www.mositouch.com/
Germany	Heidelberg & Freiburg	SIT	10	NA	1000-2300	Field pilot completed with sterile males from a local strain produced in Italy (CAA). 56-82% induced sterility. No information available on a follow-up.	*Ae. albopictus*	II	[15]
Greece	Vavrona (Athens)	SIT	10	NA	3000	Field pilot completed with sterile males from a local strain produced in Italy (CAA). 78% reduction in egg density. Shift to a phase 2 trial of boosted SIT in the same site (ongoing) / development of local production of sterile males ongoing.	*Ae. albopictus*	II	[16] https://www.mosquitosit.gr/
Greece	Vavrona (Athens)	SIT	10	NA	3000	Intermitent releases (beginning and end of the mosquito season). >95% reduction of adult density measured with Human Landing Catch	*Ae. albopictus*	II	A. Michaelakis, pers. com.
Indonesia	Pasar Jumat-Lebak Bulus (Jakarta)	SIT	25	NA	NA	50% induced sterility. Extension of the trials ongoing.	*Ae. aegypti*	II	[17]
Italy	Caselline, Boschi, Budrio, Santamonica	SIT	80	NA	1600	Field pilot completed in 2013. 70–80% induced sterility and suppression of egg densities.	*Ae. albopictus*	II	[18]
Italy	Bologna	SIT	70-100	NA	2081-3265	34-48% induced sterility and 47-56% egg reduction from 2021-2023. Pre-operational trials ongoing for cost reduction, with commercial activity by Centro Agricoltura Ambiente “G.Nicoli” (CAA).	*Ae. albopictus*	III	[19] Information provided by CAA.

Jamaica	Kingston (St. Catherine Parish)	SIT	NA	NA	NA	Medium scale production, trapping & monitoring field sites, MRR. No update on the field trial available.	*Ae. aegypti & Ae. albopictus*	I	https://jis.gov.jm/jamaica-to-undertake-mosquito-sterilisation-pilot-project/
Malaysia	Melaka state	SIT	4	16000	NA	MRR conducted. Extension of the trials ongoing.	*Ae. aegypti*	II	[20, 21]
Mauritius	Panchvati	SIT	3	NA	20000	55.7 % suppression of egg densities and 63.6% suppression of adult females. New pilot trial ongoing in an urban area (Ministry of Health).	*Ae. albopictus*	II	[22]
Mexico	Tapachula	SIT	24	697	6000	BLDC. MRR conducted to assess drone release of sterile males. No available report on the suppression trial. No information available on a follow-up.	*Ae. aegypti*	II	[23, 24]
Mexico	Merida	IIT / SIT	50	1241	4000	Pilot trial show suppression of egg hatch by 76.5 -91.9%, indoor females by 47.7-90.9% and outdoor females by 50.0–75.2%. Ongoing USAID project will test the impact on disease transmission and cost effectiveness at scale for transition to phase IV.	*Ae. aegypti*	III	[25] https://divportal.usaid.gov/s/project/a0g3d000000cNZAAA2/testing-a-combined-sitiit-approach-to-control-mosquitoborne-diseases-at-scale?utm_medium=email&utm_source=govdelivery
Philippines	Old Balara	SIT	NA	NA	NA	Building of mass-rearing facility, purchase of irradiator.	*Ae. aegypti*	I	[26]
Portugal	Faro	SIT	NA	1946	4000	Field pilot completed with sterile males from the local strain produced in Italy (CAA). No result published yet.	*Ae. albopictus*	II	H. C. Osório, pers. com.
Senegal	Dakar	SIT	NA	NA	NA	MRR in Dakar using sterile males produced in Austria and transported as chilled irradiated adults in insulated boxes (FAO-IAEA Insect Pest Control Laboratory).	*Ae. aegypti*	I	[27] Gueye Fall & T. Bakhoum, pers.com.
Serbia	Novi Sad	SIT	17.2	3000-4000	4444	Field pilot completed with sterile males from an Italian strain produced in Italy (CAA). 51.5% induced sterility and 64% suppression of egg density. Perspectives of upscale through a national IAEA TC project and the private company BIODRON 369.	*Ae. albopictus*	II	https://www.srbatom.gov.rs/srbatomm/pedeset-hiljada-sterilnih-muzjaka-tigrastog-komarca-pusteno-u-novom-sadu-u-okviru-projekta-za-kontrolu-stetocina-na-ekoloski-prihvatljiv-i-odrziv-nacin/?lang=en A. I. Cupina, pers. com.
Singapore	Yishun, Tampines, Bukit Batok and Choa Chu Kang	IIT / SIT	1033	607 872	NA	Suppression of adult females by 92.7% and 98.3% in two pilot sites. Epidemiological trial demonstrated an average reduction in dengue incidence rate of 56·88% overall (95% CI 51·88–58·46) at an average coverage of 34·49%; 65·81% (64·24–67·26) at a 68·07% coverage and up to 71·01% (163 of 230, 69·47–72·41) in Yishun, at a 72·79% coverage. Operated by the National Environment Agency within the country's integrated vector control management strategy.	*Ae. aegypti*	IV	[28, 29]
South Africa	KwaZulu / Natal	SIT	5	NA	5000	BLDC, operational research, insectary with irradiation capacity, communication campaign, MRR	*An. arabiensis*	I	[30]

Spain	La Vilavella & Polinyà de Xuquer	Boosted SIT	58	NA	2620 - 2712	Suppression of adults by 89 to 98%.	*Ae. albopictus*	II	[14]
Spain	Valencian Community	SIT	177	NA	2250	19.5 -31.7% induced sterility, concurrent to a 70–80% suppression of adult females in a 45ha pilot area. Pre-operational trials and R&D activities for cost reduction ongoing by Generalitat Valenciana and Grupo Tragsa.	*Ae. albopictus*	III	[31, 32]
Sri Lanka	Colombo	SIT	30	NA	3300	95.5% suppression of adult females. Extension of the trials ongoing.	*Ae. albopictus*	II	Prof. Menaka D. Hapugoda, pers com. [33]
Sudan	Dongola	SIT	NA	NA	NA	MRR in 2016. Dose-response curve, development of mass-rearing. Field trial cancelled.	*An. arabiensis*	I	[34, 35]
Switzerland	Ticino	SIT	45	NA	3000	Field pilot completed with sterile males from the local strain produced in Italy (CAA). 18% induced sterility and 66.7% reduction in adult females density.	*Ae. albopictus*	II	[36]
Thailand	Plaeng Yao District	IIT / SIT	5	NA	5000	84% induced sterility and 97.3% suppression of the mean number of females per household. Plan for a RCT to measure epidemiological impact presented to WHO-VCAG but no information available on a follow-up.	*Ae. aegypti*	II	[37]
USA	Captiva island, Florida	SIT	230	379	5000	Suppression > 95% of adults. Shift to Fort Myer because of a cyclone.	*Ae. aegypti*	II	[38]
USA	St. Augustine, Florida	SIT	NA	NA	NA	Dose-response curve conducted. Pilot site identified.	*Ae. aegypti*	I	[39]

BLDC = baseline data collection conducted. **SIT**= Sterile insect technique; **IIT**= Incompatible insect technique; **MRR**= Mark–release–recapture; **NA**= Not available

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