

Rad Source Technologies

- Since 1997
- Involved with:
 - Blood Irradiation GVHD (Medical Device)
 - Cancer and Immunology Research
 - Viral Research (COVID vaccinations)
 - Phytosanitary Treatments for Food
 - Non-destructive testing
 - Cannabis sanitization
 - Large Scale Insect Pest Control called Sterile Insect Technique (SIT) – FL



















QUASTAR®

Quastar Patented Technology

Superior to Point Source X-ray technology. Our patented, advanced emitter technology platform – Quastar® produces high output and high-quality photons more efficiently.

- Beam Hardness
- High X-ray Output per unit Power
- High Throughput per kW
- Repairable
- Expansive Radiation Field
- Excellent Dose
 Uniformity





Photonic Cloud



Point Source X-ray technology.

Quastar® X-ray technology. High output and more highquality photons!



Proven Leadership & Reliability

25+
years

7Markets

1300+
Customers



blood transfusion



cancer research



viral inactivation



food safety



non-destructive testing



cannabis sanitization



sterile insect technique









The premier Sterile Insect Irradiator in the world, providing superior dose uniformity and industry leading reliability.

Environmentally Friendly Insect Control Clean, renewable energy to sterilize mass-reared insects, they remain sexually competitive yet cannot produce offspring. SIT does not involve genetic engineering.

Patented Carousel Circulation Technology High capacity, single chamber design with integrated multi-canister carousel technology for maximum throughput.

Lower Cost of Ownership than Gamma Hassle Free Ownership, no decay curve calculation, no need for secure or shielded room, no nuclear site license required, no added safety costs.







Contact Our In-House Entomologist to Learn More

www.radsource.com/SIT 678-765-7900













SIT Users

- Lee County Mosquito Control
- USDA McAllen Texas
- USDA Hilo Hawaii
- Harris County Mosquito Control
- USDA Parlier & UC Riverside
- Verily Life Sciences (Google)
- USDA-ARS-Salinas
- University of Florida
- Anastasia Mosquito Control
- NICD South Africa
- USDA Buzzard's Bay

*And many more!











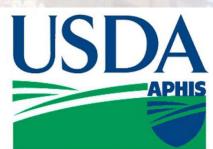










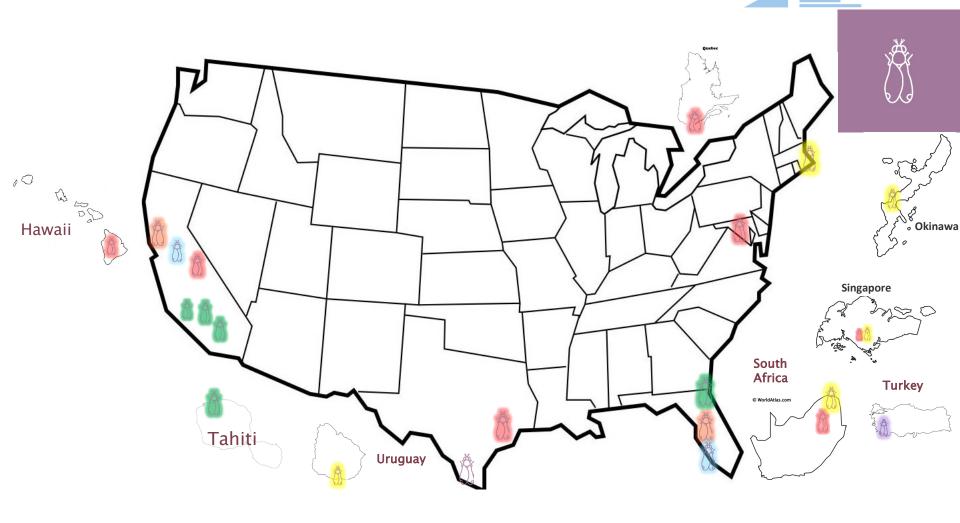


















HOME

NEWS

WEATHER

RESEARCH ARTICLE



Lee County uses new technique to eradicate mosquito population

The method and release procedure has taken two years to research and mobilize.

Friday, November 8th 2019, 7:26 PM EST by Delia D'Ambra

LEE COUNTY, Fla. - This week, Lee County Mosquito Control made history.

The district became the first-ever control district in the county to release male Aedes Aegypti mosquitoes, sterilized by means of X-ray, to help eradicate the population in an area.

VECTOR CONTROL, PEST MANAGEMENT, RESISTANCE, REPELLENTS

X-Ray-Induced Sterility in *Aedes albopictus* (Diptera: Culicidae) and Male Longevity Following Irradiation

H. YAMADA, 1,2,3 A. G. PARKER, 1 C. F. OLIVA, 1,4,5 F. BALESTRINO, 6 AND J.R.L. GILLES1

Combining the Sterile Insect Technique with the Incompatible Insect Technique: III-Robust Mating Competitiveness of Irradiated Triple Wolbachia-Infected Aedes albopictus Males under Semi-Field Conditions

Dongjing Zhang^{1,2}, Rosemary Susan Lees², Zhiyong Xi^{1,3}, Kostas Bourtzis², Jeremie R. L. Gilles²*



nature

Article | Published: 17 July 2019

Incompatible and sterile insect techniques combined eliminate mosquitoes

Xiaoying Zheng, Dongjing Zhang, [...] Zhiyong Xi ⊠

Nature **572**, 56–61(2019) Cite this article

20k Accesses | 51 Citations | 518 Altmetric | Metrics



Sterile Mosquito Delivery and Releases







- -Significantly lower cost than a single e-beam facility or gamma
- -Increased <u>reliability</u>, <u>redundancy</u>, and devices can be moved
- -Comes with 1 year service/parts warranty contract
- -Internet capable device, allows for quick service response
- -Can x-ray blood in the same machine
- -Can be delivered within 120 days from order placed
- -Password, username, and physical start key protected
- -Multiple users can be programed with different levels of admin privileges
- -Various doses and presets can be selected, saved, and reused
- -Each device needs an external water chiller for









