

IQK

Indoor residual spray programs now have a simple and cost effective way to confirm the quality of spraying, ensuring houses and families are properly protected

Technical details

Insecticide Quantification Kits (IQK) are chemical or enzyme-based, biochemical assays that cover the insecticide classes most commonly used in IRS campaigns and can be used at or near the spray site to assess the level of insecticide present on the sprayed surface

Partners

The original 'proof of concept' technologies were developed by a consortium of leading research institutions including the Liverpool School of Tropical Medicine, the London School of Hygiene & Tropical Medicine, the University of Crete and the Agricultural University of Athens. Final production of the kits is being undertaken by Avima SA.

Use

Indoor Residual Spraying (IRS) has been a significant factor in the reduction of deaths from vector-borne diseases over the past decade but the success of IRS programmes depends heavily upon spray quality, and, until now it has proved challenging to assure the quality of spraying.

Benefits over existing alternatives

- Until the IQK were developed, the only tools available to spray program managers for testing the effectiveness of spraying were cone assay tests and High Performance Liquid Chromatography tests (HPLC). Both of these are difficult, impractical and, in the case of HPLC, expensive.

Features

- Cost effective, low cost per test
- Easy to use in the field by locally recruited personnel
- Covers the most commonly used insecticide classes: cyanopyrethroids, carbamates, and DDT.
- The range is currently being extended to cover organophosphates
- Provides a rapid assessment of spray team performance so that problems can be rectified promptly, whether by re-spraying, retraining or improved supervision.

Registrations

- Registration is not required for this product,

Time to develop

Project started Q4, 2005

Two of the IQK are currently being brought into production by IVCC industrial partner AVIMA.

Performance

The IQK technologies have proven effective both in the laboratory and also in field trials and demonstrations in Equatorial Guinea, Tanzania, Vanuatu, and Ethiopia.



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