

Technology's description

NPK fertilizers are widely used in agriculture, horticulture, private and domestic indoor areas, gardens and parks. Beyond the benefits for the growth of the greenery and crops, these fertilizers have been identified to have an attraction effect for female mosquitoes looking for a place to lay their eggs (Darriet and Corbel 2008; Darriet and al., 2010).

Actually, when using a combination such as NPK- with a larvicide, part of the fertilizer is drained through the soils, thus creating attractive breeding sites. The larvicide will also be drained and kill mosquito larvae when hatching after egg deposition by the mosquitoes.

In many kinds of urban or rural areas, the water collecting devices containing mosquito larvae (flower pots is just an example) are numerous as well as in irrigated soils. In particular, these locations are the favorite ones for *Aedes aegypti* and *Aedes albopictus*, both carriers of diseases such as chikungunya, zika and dengue.

Advantages

- Attracting & destroying larvae at breeding sites (plant dishes for example) or in standing waters (rice fields for example)
- While allowing growth of plants in agricultural soils, household and gardens
- Fight against vector-borne diseases (chikungunya, zika and dengue) & potential use against *Anophele* (vector-borne of Malaria)

Applications

- Domestic: indoor & outdoor – gardens - parks & horticulture. Agriculture: irrigation, rice fields.

Intellectual property

Patent

Development level

Technology validated in lab



Technology transfer

- License- co-developments.



Source : IRD