Flyash based mosquito larvicidal formulations of *Bacillus thuringiensis* var. *israelensis*

Salient features of the technology

- The applicability of the technology lies in control of mosquito breeding in aquatic habitats subsequently reducing mosquito borne diseases in an environment friendly manner.
- The technology provides a method for preparation of mosquito larvicidal formulation comprising of fly ash and spore crystal complex of *Bacillus thuringiensis* var. *israelensis* along with specific additives to obtain three formulations viz. Water Dispersible powder (WDP), slow release floating briquettes (BR) and slow release granular (GR) formulations.

Fig. Flyash based mosquito larvicidal formulations of Bacillus thuringiensis

WDP Granules Briquettes

- These formulations are very effective in killing larval stages of different species of mosquitoes found in polluted and clean water bodies.
- They act by releasing the active ingredient at the feeding zone of the mosquito larvae and can hence control the proliferation of mosquitoes.
- They have longer residual activity and exert control on the larval population of mosquitoes for a prolonged period of one to several weeks.
- The technology is also cost-effective and user friendly as the production of bacterial mass uses locally available cheap raw materials and formulation uses flyash as carrier material which is a waste product from coal mines.
- Development of project is up to pilot scale. As and when required, the bacterial cell mass will be produced and formulated.
- It is developed by an ICMR institute, the Vector Control Research Centre located at Puducherry,
- Patents have been filed in India and 4 other countries, viz., Nepal, Bhutan, Cambodia and Myanmar.