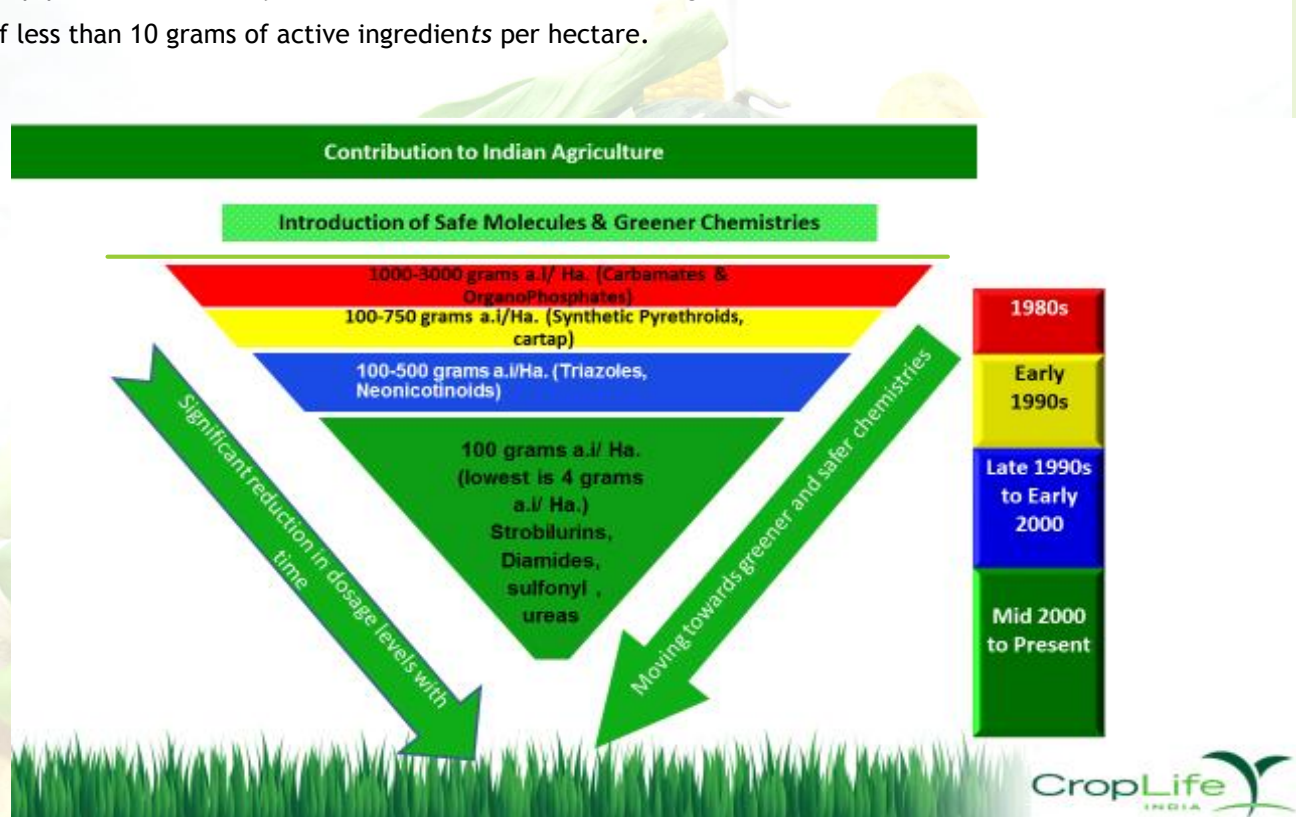


FACT SHEET

INTRODUCTION OF NEWER AND SAFER CROP PROTECTION TECHNOLOGIES TO INDIAN AGRICULTURE

Safer & Greener Chemistries:

Crop protection technologies have developed over the years with the advancements in Research & development on chemistries that are being introduced today, having better toxicological profiles with lower dosages over decades. This has been possible due to the Government's robust crop protection regulation and CropLife India member companies' efforts to bring in safer and greener crop protection solutions to Indian agriculture that would improve livelihoods for farmers through improvements in crop productivity. Today the crop protection industry has been successful in introducing chemistries that have lowest dose to the extent of less than 10 grams of active ingredients per hectare.



EVOLUTION OF CROP PROTECTION PRODUCTS

During the 1980s- 1000-3000 grams of active ingredients like carbamates and organophosphates were used in one hectare of land. These were very broad spectrum products.

In the early 1990s, the dosage levels came down to 100 - 750 grams per hectare.

By the late 1990s to early 2000, the dosages had further come down to 100 - 500 grams of chemicals like Neonicotinoids and Triazoles.

From mid-2000 to the present, the dosages have come down to less than 100 grams per hectare with favorable toxicological profile chemicals like strobilurins, diamides and sulfonyl urea.

The lower dosage is a result of strong R&D, which has led to invention of chemistries that are sophisticated in their mode of action while keeping the toxicity levels very low.

MANAGING NATIONAL CROP EMERGENCIES:

CropLife India member companies have contributed to Indian Agriculture during national crop emergencies due to infestation of pests such as Phalaris minor, Heliothis armigera, Rice BPH, Cotton White fly & CLCV by introducing New and innovative crop protection solutions.

Heliothis armigera is a pest that feeds on pulses, Bengal gram, soya beans, black gram, pea, cotton, maize, tomato, cotton bolls, sun flower and a variety of vegetables.

Phalaris minor (gehunsa) is the major weed in most of the wheat field, in certain localities, the intensity of this weed is so high that it has become rather impossible to grow wheat crops.

The RICE BPH (**BROWN PLANT HOPPER**) is the most destructive pest in all RICE growing areas of India.

CLCV Cotton leaf curl virus disease has assumed serious proportions in the most potential irrigated cotton belt of north India

CROP PROTECTION SOLUTIONS TO NATIONAL EMERGENCIES

HELIOTHIS ARMIGERA
&

PHALARIS MINOR

RICE BPH

COTTON WHITE FLY
&
CLCV

