

REPORT ON HIGHLY HAZARDOUS PESTICIDES IN TANZANIA AND PROPOSED ACTIONS FOR PHASE OUT



7 February 2019

Table of Contents

List of Figures	iv
List of Tables	iv
Abbreviations	v
I. Report on pesticides and HHPs	1
1. Introduction to the country	1
1.1 General overview of the country and its agriculture activities.....	1
1.2 Main crops produced in the country.....	2
1.3 National pesticide registration and control policy framework.....	2
1.4 Authorities responsible for the registration of pesticides, role of different Ministries in the country.....	3
1.5 International chemical conventions related to pesticides (Stockholm, Montreal Protocol, and Rotterdam) the country ratified and the name of the Designated National Authority (DNA) for each convention, and a focal person for SAICM.....	5
2. Status of pesticide use in the country	6
2.1 The list of nationally registered pesticides.....	7
2.2 The list of HHPs amongst list of nationally registered pesticides.....	8
2.2.1 Active ingredients.....	8
2.2.2 Crops using HHPs.....	8
2.3 General data on the volume of use of HHPs for agriculture.....	9
2.4 General data on the volume of use of HHPs for non-agriculture (household and public health) purposes.....	9
2.5 List of HHPs banned in other countries but in use in the country.....	9
2.6 Human health, environmental impacts or human rights issues related to HHPs in the nation.....	10
2.7 National provisions to phase out HHPs, ban pesticides and deregister the already registered pesticides or application of the precautionary principles.....	11
2.8 Companies/associations representing the pesticide industry in the country.....	11
3. National endeavors to phasing out HHPs	12
3.1 Projects/programs and campaigns to phase out HHPs.....	12
3.2 Main challenges in the process of campaigning the phasing out of HHPs.....	12
3.3 Recommendations and project ideas that support the national HHPs phase out.....	13
II. Report on alternatives to HHPs	15

1.1	National IPM policy framework	15
1.2	National organic agriculture policy framework	15
1.3.	Policy frameworks that support the import, manufacture, distribution and use of bio-pesticides	16
2.	National implementation of crop-specific, pest-specific alternatives to HHPs.....	16
2.1	National IPM implementations.....	16
2.2	National organic agriculture implementation.....	20
2.3	Practices based on indigenous knowledge that are being used to replace HHPs.....	20
3.	National initiatives in agroecology implementation.....	22
3.1	Organizations that support and initiate agroecological implementations in the nation	22
3.2	Recommendations and project ideas emerging from the challenges	23
III.	Public awareness in relation to HHPs.....	24
	References.....	24
	Annex 1: List of HHPs among the registered plant protection substances in Tanzania (2018)	26

List of Figures

Photograph 1: A sign showing a direction to an IPM demonstration farm in Mvomero District - Tanzania	20
--	----

List of Tables

Table 1: Information related with pesticides MEAs and SAICM	5
Table 2: Some crops using HHPs in Tanzania.....	8
Table 3: Some HHP registered in Tanzania but banned in other countries	9
Table 4. Companies /associations representing the pesticide industry	11
Table 5: List of potential plants used for botanical extracts.....	21
Table A1: HHPs registered and used in Tanzania.....	26

Abbreviations

ASDP	-	Agricultural Sector Reform Programme
CBO	-	Community Based Organization
DNA	-	Designated National Authority
DPPOs	-	District Plant Protection Officers
DRC	-	Democratic Republic of Congo
EU	-	European Union
FAO	-	Food and Agriculture Organization of the United Nations
FFS	-	Farmer Field School
GCLA	-	Government Chemist Laboratory Authority
GTZ	-	German Agency for Technical Cooperation
HHPs	-	Highly Hazardous Pesticides
IFAD	-	International Fund for Agricultural Development
IPM	-	Integrated Pesticides Management
IPMP	-	Integrated Pesticides Management Plan
KAEMP	-	Kagera Agriculture and Environmental Management Programme
KIHATA	-	Kilimo Hai Tanzania (Organic Agriculture in Tanzania)
LGAs	-	Local Government Authorities
MARAFIP	-	Mara Region Farmers Initiative Project
M&E	-	Monitoring and Evaluation
MEAs	-	Multilateral Environmental Agreements
MoA	-	Ministry of Agriculture
MVIWATA	-	National Network of Small-Farmers Groups in Tanzania
NGO	-	Non-Governmental Organization
NPPAC	-	National Plant Protection Advisory Committee
OPEC	-	Organization of the Petroleum Exporting Countries
PAN	-	Pesticide Action Network

PARTS	-	Pesticides Approval and Registration Technical Sub-committee
PELUM	-	Participatory Ecological Land Use Management
PHS	-	Plant Health Services
PO-RALG	-	Prime Minister's Office - Regional Administration and Local Government
PPS	-	Plant Protection Substances
SAICM	-	Strategic Approach to International Chemicals Management
SAT	-	Sustainable Agriculture Tanzania
SEVIA	-	Seeds of Expertise for the Vegetable Industry of Africa
SPFS	-	Special Programme for Food Security
TOAM	-	Tanzania Organic Agriculture Movement
TOFO	-	Tanzania Organic Foundation
TPRI	-	Tropical Pesticides Research Institute
URT	-	United Republic of Tanzania
VEO	-	Village Executive Officer
VPO-DoE	-	Vice President's Office – Division of Environment
WHO	-	World Health Organization

I. Report on pesticides and HHPs

1. Introduction to the country

Tanzania consists of a mainland and the Islands of Zanzibar (Unguja and Pemba) and Mafia in the Indian Ocean. It is the largest country in East Africa, with a total area of about 945,000 sq. km. It is bordered by Kenya (northeast) and Uganda (north), Rwanda, Burundi, and the Democratic Republic of the Congo (DRC) to the West, Mozambique and Malawi (south), and Zambia to the southwest. The eastern boundary runs along the Indian Ocean. Broadly, the country is divided into regions, which are further sub-divided into districts, then divisions, wards (urban or rural wards) and finally villages and sub-villages. In 2017, Tanzania's population was estimated at 51.5 million with an average annual growth rate of 3 percent. The mainland Tanzania includes well delineated regions: the coastal plains, which vary in width up to 64km and have tropical vegetation; the Masai grassland in the north, which varies from 213 to 1,067m above sea level, and contains two mountains, Kilimanjaro, 5,895m (19,341ft) above sea level and Africa's highest peak; and Mount Meru, 4,565m (14,973ft); and an upland referred to as the Southern Highlands in the south of the country towards Zambia and Lake Nyasa (Malawi). Over 50 percent of the country is made up of savannah and bush cover; and semi-desert accounts for the remaining land area, with the exception of the coastal plains. Around 53,000 km² is inland water; mostly lakes in the Rift Valley (Lake Victoria and Lake Tanganyika both in the northern and western borders of the country, respectively).

1.1 General overview of the country and its agriculture activities

Tanzania has rich natural resources for agricultural development. The country has 94.5 million hectares of land, of which 44 million hectares are classified as arable, but only 24% of the arable land is under cultivation. Of the 50 million hectares suitable for livestock, only 26 million hectares is under use, while the rest cannot be accessed mainly due to tsetse fly infestation. It has the third largest livestock population in Africa, after Sudan and Ethiopia. About 29.4 million hectares are assessed as potential for irrigation, of which 2.3 and 4.8 million hectares are regarded as high and medium potential, respectively. Although it has been on the increase and has doubled over the past 10 years, the area under irrigation by 2013 was 450,392 hectares, which is less than 20 percent of the high potential area for irrigation and less than five percent of the cultivated land. Though the country is well endowed with a high potential base for agriculture development, there is only a small quantity of large-scale commercial farms in the sector. Agricultural production is dominated by smallholders. They represent most of the rural families; however, notably, half of them are commercial, not subsistence, in that they sell from a minimum of one-quarter of their output to typically half or more in the local community.

Tanzania's cropping calendar follows two distinct seasonal patterns. The seasons cover unimodal rainfall areas in the south, west and central parts of the country, while the long and short rain seasons (popularly known as *Masika* and *Vuli* seasons, respectively) cover bi-modal rainfall areas in the north and eastern parts of the country.

1.2 Main crops produced in the country

The main crops produced are maize (corn), rice, sorghum, millet, pulses (beans and peas), cassava and bananas (plantains). These are the main staple foods produced in Tanzania. Maize is the most widely consumed staple food in Tanzania, and the country imports significant quantities of wheat to meet local demand for wheat flour. Consumption of other staples varies across the country based on local supply and demand dynamics. Cattle, goat and sheep are the major sources of red meat consumed in Tanzania. Tanzania's main exported cash crops are tobacco, cashew nuts, coffee, tea, cloves, cotton, and sisal (<https://www.tanzaniainvest.com/crops>).

In the north eastern parts of the country, flowers are grown for business. These are mainly grown in greenhouses in the Arusha and Kilimanjaro regions, which have a common border with Kenya, and in some other high altitude areas such as Iringa, Mbeya and Njombe.

Historically, most crops were grown for subsistence by smallholder farmers who practiced crop rotation and intercropping, which put a check on pest populations. However, recent developments have resulted in monoculture and thus an increased pest population. To cope with this situation, large amounts of pesticides and other agrochemicals are used to manage pests and ensure the cultivation of high-quality products (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5484550/>).

1.3 National pesticide registration and control policy framework

Section 19 of the Plant Protection Regulations of 1999 requires the Ministry of Agriculture and Tropical Pesticides Research Institute (TPRI) to register all Plant Protection Substances (PPS) that are imported, exported, produced or used in Tanzania. This mandate is under the Tropical Pesticides Research Institute Act of 1979. The regulations are part of The Plant Protection Act, 1997. There is also a national Agricultural Policy, 2013.

For registration of PPS, the dealer is required to initiate the application process by filling out an application form and submitting it to the Pesticides Registrar at TPRI. Among other issues, such as safety of humans and the environment, TPRI has to ensure that the substance is tested and analyzed to suit the intended use.

The Ministry of Agriculture (MoA) formulates policy and the laws governing dealing with pesticides, as well as enforcing the law. The mandate to ensure that pesticides/PPS are well managed therefore rests on these two national bodies, i.e. MoA and TPRI. TPRI is a government agency under the MoA. Both MoA and TPRI have pesticides inspectors, and market surveillance is one of their roles. (MoA formulate policies and laws and enforce the laws)

The Government Chemist Laboratory Authority (GCLA) is the national focal point for the Strategic Approach to International Chemicals Management (SAICM) as well as the Rotterdam Convention Designated National Authority (DNA) for Industrial and Consumer Chemicals, while MoA is the Rotterdam Convention DNA for agricultural chemicals (pesticides).

1.4 Authorities responsible for the registration of pesticides, role of different Ministries in the country

The authority responsible for approval and registration of pesticides in Tanzania is the Tropical Pesticides Research Institute (TPRI) which is under the MoA.

During the registration process, assessment of the technical dossiers for the purpose of evaluating impacts to human health and the environment and carrying out bio-efficacy effectiveness for the intended uses of the pesticide are among the tasks carried out. The technical dossiers and the bio-efficacy reports of PPS are subsequently submitted for approval consideration to the Pesticides Approval and Registration Technical Sub – Committee (PARTS), and endorsement is made by the National Plant Protection Advisory Committee (NPPAC). The members of PARTS and NPPAC are appointed as required by the law and are considered competent authorities.

The role of the Ministry of Agriculture

- The Ministry of Agriculture is the main overseer of the agricultural activities in the country. Among such activities is the control of the quality of pesticides. It consists of eight divisions, of which two are directly responsible for the management of pesticides; these are the Crop Development and Agricultural Research and the Training Development Divisions.
- The Ministry of Agriculture, through the Plant Health Services Unit (which is under the Crop Development Division), is responsible for the provision of regulatory services on the registration of pesticides and control of quality and standards of plant protection substances. This unit is also responsible for enforcing the plant protection legislations. Other functions of this unit are to promote the use of information and communication technology, development and maintenance of the plant health databank, and to monitor bio-safety and bio-security aspects in agriculture.

The role of the President's Office - Regional Administration and Local Government

The President's Office - Regional Administration and Local Government (PO-RALG) - is responsible for coordinating and implementing agricultural programs and activities in Local Government Authorities. This is done through the Economic and Productive Sectors Section, which is under the Sector Coordination Division. Among other activities, the Economic and Productive Sectors Section is responsible for:

- Overseeing implementation of various national agricultural priority initiatives;
- Facilitating organization and management of agriculture sectors' Extension Service delivery in Regional Secretariats and Local Government Authorities;
- Provision of capacity building on agricultural issues to extension officers in Local Government Authorities;
- Conducting supervision visits to monitor the implementation of various agricultural activities in Local Government Authorities; and
- Preparing and disseminating various guidelines on agricultural issues, including pesticides management.

The role of the Vice President's Office – Division of Environment

The Vice President's Office – Division of Environment (VPO-DoE) – is responsible for providing overall policy guidance, coordination, expertise and services for sustainable environmental management and development. The VPO – DoE is also a National Focal Point of all Multilateral Environmental Agreements (MEAs), including the Stockholm Convention on Persistent Organic Pollutants, the Rotterdam Convention, the Montreal Protocol, and the Basel Convention. The following environmental management activities are therefore performed under the VPO-DoE - Pollution Control Section:

- Develop, evaluate and review environmental policies, Acts, regulations, guidelines, programmes and strategies which are related to environmental pollution prevention and control;
- Coordinate and monitor performance with Ministries, Departments and Agencies (MDAs) and Local Government Authorities (LGAs) on implementation of policies, Acts, regulations, guidelines, programmes, strategies and plans that are related to environmental pollution prevention;
- Promote application of economic instruments for pollution prevention and control;
- Promote the application of technologies related to sustainable promotion and consumption patterns;
- Develop and disseminate educational materials for public awareness on policy issues and best practices for pollution control; and

- Develop, coordinate and monitor implementation of multilateral, bilateral and regional agreements related to environmental pollution management.

The Director of VPO-DoE is also the Global Environment Facility (GEF) National Focal Point.

1.5 International chemical conventions related to pesticides (Stockholm, Montreal Protocol, and Rotterdam) the country ratified and the name of the Designated National Authority (DNA) for each convention, and a focal person for SAICM

Table 1 below shows some information related to conventions (Stockholm, Montreal Protocol, and Rotterdam) the country has ratified and the name of the Designated National Authority (DNA) for each convention, and a focal person for SAICM.

Table 1: Information related to pesticides MEAs and SAICM

International Convention/Agreement	The name of the Designated National Authority (DNA)	A focal person
Stockholm Convention on Persistent Organic Pollutants Date ratified: 30 April, 2004	Vice Presidents Office – Division of Environment (VPO-DoE)	Ms. Magdalena John Mtenga Title: Assistant Director Department: Division of Environment Institution: Vice President's Office Dodoma United Republic of Tanzania Email: magejohn@yahoo.com ; magdalena.mtenga@vpo.go.tz
Montreal Protocol Date ratified: 16 April 1993 (accession)	Vice President's Office – Division of Environment (VPO-DoE)	Ms. Magdalena John Mtenga Title: Assistant Director Department: Division of Environment Institution: Vice President's Office Dodoma United Republic of Tanzania Email: magejohn@yahoo.com ; magdalena.mtenga@vpo.go.tz
Rotterdam Convention Date ratified: 26 August, 2002	Ministry of Agriculture (MoA) and the Chief Government Laboratory Authority	1. Name: Ms. Jeniva Kamuhabwa Job title: Agricultural Officer, Officer in charge of Pesticides Management Role(s): Rotterdam Convention Designated national authority for pesticides (DNA P) Department: Plant Health Section, Department of Crop Development Institution: Ministry of Agriculture Dodoma United Republic of Tanzania Email: jeniva_machumu@yahoo.com

International Convention/Agreement	The name of the Designated National Authority (DNA)	A focal person
		2. Name: Dr. Fidelice M.S. Mafumiko Job title: Chief Government Chemist Role(s): Rotterdam Convention Designated national authority for Industrial and Consumer Chemicals (DNA) Physical Address: 5 Barack Obama drive, Postal Address: P.O. Box 164 Dar es Salaam. Tanzania Tel: +255 22 2113383/4 Fax: +255 22 2113320 Email: gcla@gcla.go.tz
Strategic Approach to International Chemicals Management (SAICM)	Government Chemist Laboratory Authority (GCLA)	Name: Dr. Fidelice M.S. Mafumiko Job title: Chief Government Chemist Role(s): SAICM National Focal Point Physical Address: 5 Barack Obama drive, Postal Address: P.O. Box 164 Dar es Salaam. Tanzania Tel: +255 22 2113383/4 Fax: +255 22 2113320 Email: gcla@gcla.go.tz

2. Status of pesticide use in the country

The International Code of Conduct on Pesticides Management issued by the Food and Agriculture Organization in 2014 defines pesticides as any substance or mixture of substances of chemical or biological ingredients intended for repelling, destroying or controlling any pest or regulating any plants. Pesticides lists include: insecticides, herbicides, fungicides, arboricides, acaricides, molluscicides, nematocides, plant growth regulator, rodenticides and defoliant.

According to the Controller and Auditor General report of March 2018, the use of pesticides in agricultural production has increased rapidly in the past decades in developing countries, including Tanzania. Based on the study conducted from July to December, 2015 in Morogoro, Arusha and Mbeya regions by Seeds of Expertise for the Vegetable Industry of Africa – SEVIA, it was shown that 84% of 135 farmers were using pesticides in horticultural production. The increase is mainly due to the expansion of new areas of production such as horticulture, which is highly practiced in northern regions like Arusha, Kilimanjaro and Tanga, as well as southern

highlands regions; namely, Mbeya, Iringa and Njombe. Other crops with high uses of pesticides include coffee, cashew nut, cotton and tobacco.

Another reason for increased use of pesticides is a need for farmers to increase agricultural production in order to meet demands of feeding the ever-increasing populations. It is reported that 81% of pesticides in Tanzania are used for agricultural activities, and the most used pesticides are insecticides, herbicides and fungicides. However, the total volume of pesticides used in Tanzania is not well documented because of a fragmented data system.

In Tanzania, farmers depend on pesticides to control and regulate the growth of their crops. Small-scale farmers are estimated to be 81% of the whole population, and they are the ones dominating the agricultural sector.

It was noted that unregistered pesticides were found in all districts and regions of Tanzania, but it was reported to be very common in regions and districts that are bordering neighbouring countries; for example, in Mtwara, Mbeya, Kigoma, Tanga, Kagera and Arusha regions.

There were pesticides (namely: Abamite, Doom, Boss, Lava, Lethal, and Romectin) found to be sold in the market without being registered by TPRI. It was further reported that these pesticides are not fit for the Tanzanian market, because these pesticides were not tested by TPRI to examine their efficacy as far as Tanzania's agricultural environment is concerned.

2.1 The list of nationally registered pesticides

Pesticides are among the Plant Protection Substances (PPS) that are registered by TPRI; it does so in three main categories shown below. The whole list of registered PPS can be viewed on <http://tpri.go.tz/storage/app/media/uploaded-files/Registered%20Plants%20Protection%20Substances%20for%20use%20in%20the%20United%20Republic%20of%20Tanzania.pdf>

The information on registered PPS has been obtained from the PPS register of 2018. The categories on PPS registration are:

- i) **Provisional:** Plant Protection Substances are placed into the provision registration category due to some reason(s) of non-compliance with any provision of the Plant Protection Regulations pending compliance with such provision or direction. The validity of registration period in this category is ONLY two years (non – renewable) and they can be imported and used under importation procedures set out in regulations.
- ii) **Full:** Pesticides registered for general use for five years (full registration). This category consists of products upgraded from the Provisional Registration after being used for at least three years without causing any serious environmental and toxicological problems. Their formulations must have been analyzed and approved in the pesticide quality

control laboratory. Products in this category can be imported, formulated, manufactured and sold in the country.

- iii) **Restricted:** Some products upgraded from experimental registration are placed in the restricted registration category if they are very toxic, environmentally persistent and bio-accumulative. The category also consists of technical materials with active ingredient contents intended for use in formulation plants.

2.2 The list of HHPs amongst list of nationally registered pesticides

Below in Annex 1 (Table A1) is a list of what could be HHPs, according to Pesticide Action Network (PAN) criterion. These have been identified from a long list of plant protection substances registered in Tanzania.

2.2.1 Active ingredients

The active ingredients for each product registered are included in the table (Annex 1, Table A1) of registered PPS. The good thing is that the register indicates the trade name as well as the common name of the product, where the common name is the name of active ingredient/s.

2.2.2 Crops using HHPs

The following Table 2 shows some of the crops using HHPs in Tanzania. A lot of plant protection substances are used for flower farming, too; unfortunately, such information has not been included in the table below because none of the flowers growers were visited (as the project concentrated in Dar es Salaam, Morogoro and Dodoma regions - the latter is the political country headquarters following the move from Dar es Salaam in 2016). From the register of PPS, quite a number of active ingredients considered to be HHPs are listed to be intended for use in horticulture production, which includes flowers like roses.

Table 2: Some crops using HHPs in Tanzania

S/N	HHPs	Crops
1.	Furadan	Vegetables
2.	Lannate	
3.	Redcat	
4.	Endosulfan	Coffee
5.	Paraquat	
6.	Chlorpyrifos	
7.	Fenitrothion	
8.	Profenofos	
9.	Glyphosate	

2.3 General data on the volume of use of HHPs for agriculture

Data on the volume of HHPs could not be accessed. TPRI compiles this data, however it is not accessible to the public.

2.4 General data on the volume of use of HHPs for non-agriculture (household and public health) purposes

There is no accessible data to the public.

2.5 List of HHPs banned in other countries but in use in the country

It is important to note that one active ingredient is used in different trade names (product names). It implies that, for example, Diazinon may be registered 12 times because it is used in 12 different products (products with different trade names but same active ingredient).

The following in Table 3 are examples of PPS registered for use/importation in Tanzania that are not approved for use in other countries such as the European Union (EU). The identification is based on PAN criterion.

Table 3: Some HHPs registered in Tanzania but banned in other countries

S/N	HHP Name	Used for what	Where and when banned
1.	Acephate	Constituent in 8 registered products. Primarily used for horticulture, such as cultivating roses and beans.	The substance is banned in the EU and in China. It is also banned in Sweden since 1992.
2.	Amitraz	Registered in one product. Used in horticulture and in several products for protecting cattle and sheep.	Banned in the EU and several Middle Eastern countries, plus Cambodia.
3.	Azocyclotin	Used mainly for horticultural crops (roses).	The substance is not approved for use in the EU (and has never been used in Sweden).
4.	Bendiocarb	Registered in Tanzania, for use against mosquitoes.	Not approved for use in the EU.
5.	Carbaryl	Registered in Tanzania for household pests and for some agricultural purposes, e. g. cotton production.	EU and four non-European countries have banned the substance (among them Mozambique).

S/N	HHP Name	Used for what	Where and when banned
6.	Fenitrothion	Registered in Tanzania in 19 products. Used in coffee, corn and in household pests.	Banned in the EU. Use in Sweden ended before 1995 with the exception of one product approved for grape cultivation until 2007.
7.	Diafenthiuron	4 products registered in Tanzania, for use in horticulture (roses, cabbage, etc.).	Banned in the EU.
8.	Diazinon	12 products registered in Tanzania, mostly for vegetables, and to some extent also for coffee, sugarcane, and tobacco and household bugs.	Banned in the European Union and Mozambique.
9.	Fenvalerate	3 products registered in Tanzania, for use in cotton and tomato production.	Not approved for use in the EU.

2.6 Human health, environmental impacts or human rights issues related to HHPs in the nation

Pesticides have been linked to a wide range of human health impacts which range from short-term impacts such as headaches, nausea, skin, eye irritation, dizziness, and fatigue; to chronic impacts like cancer, reproductive effects, and endocrine disruption. According to the 2009 World Health Organization (WHO) estimation, there are 3 million cases of pesticide poisoning each year and up to 220,000 deaths, primarily in developing countries.

Based on the literature review and the interview with officials in the Morogoro District and Mvomero District, it was noted that the pesticides are used in horticulture and other crops production, including animal husbandry, and they are used to control pests, fungi and weeds. Death of cows, lowering productivity in most areas, contamination of water bodies, air and soil, allergies, respiratory problems, damage of nerves, impulses and inhibition of nerve impulses, cancer, miscarriages, tumor, failure of kidney, skin and eye irritation are among the human health and environmental effects claimed by farmers, CBOs and NGOs.

It is usually difficult to estimate the magnitude of HHPs-related health problems in Tanzania due to many reasons, such as limited health surveillance studies in connection to use of pesticides. A few available studies indicated that farmers are highly poisoned with pesticides,

but they lack knowledge on early identification of symptoms associated with contamination, as well as how to protect themselves. This observation was also among the findings of the National Audit Office – where it was stated that ‘In general, it can be said that there is inadequate evaluations and assessments made by the Ministry of Agriculture and TPRI to identify health and environmental problems related to the use of pesticides’. Some incidents were reported in the media in the past, especially on the incidents related to intentional misuse of pesticides. Such data is not yet confirmed by the responsible authorities and is not readily available.

2.7 National provisions to phase out HHPs, ban pesticides and deregister the already registered pesticides or application of the precautionary principles

There is no specific provision to ban HHPs in the country.

2.8 Companies/associations representing the pesticide industry in the country

Some of the companies /associations representing the pesticide industry in Tanzania are listed in Table 4 below.

Table 4. Companies /associations representing the pesticide industry

S/N	Name of company/Association in Tanzania	Affiliation to multinational company/Association
1.	CropLife Tanzania – Association of agrochemical companies in Tanzania. Some pesticides dealers are members of CropLife Tanzania.	It is a member of CropLife International.
2.	Syngenta Tanzania Ltd	It is a Swiss-based Syngenta AG global company that produces agrochemicals and seeds. As a biotechnology company, it conducts genomic research.
3.	Bayer East Africa Ltd	It is a subsidiary of Bayer AG, based in Germany, a global innovation enterprise with core competencies in the Life Science fields of agriculture and healthcare.
4.	Monsanto Tanzania Ltd	A subsidiary of Monsanto Company based in the USA.

S/N	Name of company/Association in Tanzania	Affiliation to multinational company/Association
5.	The Link Forward Trading Co. Ltd	It is a subsidiary of a China-based company that produces agricultural and other chemicals.
6.	Arysta LifeScience Tanzania	A subsidiary of Arysta LifeScience Corporation, based in Tokyo, Japan.

3. National endeavors to phasing out HHPs

TPRI is the national institution mandated to manage pesticides importation, formulation, distribution, sales and use, among others. It has started the process of identifying the HHPs use in the country and imports to the country, and their alternatives. The process is continuing. There is no confirmed plan as to when the HHPs will be phased out.

3.1 Projects/programs and campaigns to phase out HHPs

Several programmes have been undertaken in Tanzania, some of them are:

i. TPRI is implementing “a project on support for reducing risks of Highly Hazardous Pesticides in the United Republic of Tanzania (URT)”; the project is still going on and was a result of the workshop organized by the Secretariat of the East African countries from 26th – 29th September, 2016, Nairobi in Kenya. It aimed at enhancing institutional capacity in identification of HHPs and related alternatives.

ii. A project under the Africa Stockpiles Programme, implemented from 2005 to 2012, whereby obsolete pesticides consisting of HHPs were identified, collected and transported to the United Kingdom and other EU countries for disposal.

3.2 Main challenges in the process of campaigning the phasing out of HHPs

The main challenges may include:

- i. Insufficient training to key players such as pesticide inspectors, agricultural extension staffs, sellers and users.
- ii. Inadequate technical support to extension staffs and users.

- iii. Limited research and dissemination of non-chemical technologies, IPM and agroecological practices.
- iv. Lack of comprehensive HHPs list in the country.
- v. Lack of information on HHPs to some policy makers, importers, manufacturers, sellers, users and the general public.
- vi. HHPs are still registered; registrants do not know which ingredients are HHPs.
- vii. Unavailability of data for what is considered 'confidential business information'.
- viii. Lack of safer products in the market, which are usually more expensive because they are based on innovative technologies.
- ix. Poor enforcement of pesticides regulations in the country and in the East Africa sub-region, leading to the presence of illegal/unregistered pesticides in the market.

3.3 Recommendations and project ideas that support the national HHPs phase out

The following are recommendations and project ideas to support HHPs phase out that were obtained from policy-makers, formulators and importers, Local Government Authorities, farmers, and CBOs /NGOs who were consulted during the field work:

1. The government to formulate a strategy to phase out HHPs in the country.
2. Enhance knowledge of key players such as pesticide inspectors, agricultural extension staffs, sellers and users on the need, as well as on the strategy, to phase out HHPs in Tanzania.
3. The government to identify and disseminate (make public) all HHPs that are in the market in the country.
4. The government to put emphasis on the use of non-chemical technologies including IPM, agroecology and organic.
5. The government to enhance the enforcement of pesticides regulations in the country.
6. The relevant ministries to consider engaging other government authorities, such as the Tanzania Revenue Authority, in enforcing pesticides regulations.
7. Stakeholders to promote dissemination of guidelines of IPM and organic farming.
8. Stakeholders to promote research on organic farming and better alternatives to HHPs, as well as the effects of pesticides to humans and the environment.
9. Stakeholders to promote education and awareness-raising to the public and users on the HHPs, adverse effects of HHPs and alternatives of HHPs.

10. The government to strengthen agricultural extension services to farmers and other users of pesticides (have more staff, more skill, improve coordination).

II. Report on alternatives to HHPs

1. National policy frameworks that support ecosystem approaches as alternatives to synthetic pesticides

1.1 National IPM policy framework

Tanzania has a national Integrated Pest Management Plan (IPMP) which was revised in 2009. The plan was implemented during the Agricultural Sector Development Program (ASDP I) as well as the ongoing ASDP II which was launched in June 2018.

1.2 National organic agriculture policy framework

Organic agriculture in government policies in Tanzania are captured in the National Livestock policy of 2006 organic livestock farming policy statements are mentioned on page 56 as quotes):

- i. In collaboration with other stakeholders the Government will promote and create awareness on organic livestock farming.
- ii. The Government in collaboration with other stakeholders will encourage and promote investment in organic livestock farming.
- iii. The Government will strengthen technical support services in organic farming practices.

The draft National Agriculture Policy 2013, section 4.15, describes organic agriculture, and some of the Policy Statements state that:

- i) Registration and availability of organic inputs to farmers shall be facilitated.
- ii) The Government shall facilitate accreditation of organic products in order to reduce certification costs.
- iii) Initiatives for regulation and certification of organic products shall be promoted; and in collaboration with private sector, effective coordination among stakeholders shall be enhanced.

1.3. Policy frameworks that support the import, manufacture, distribution and use of bio-pesticides

The following are policy frameworks that support the manufacture, import, distribution and use of bio-pesticides:

a. Plant Protection Act No. 13 (1997)

This Act has made provisions for consolidation of plant protection to prevent introduction and spread of harmful organisms, to ensure sustainable plant and environmental protection, to control the importation and use of plant protection substances, to regulate export and imports of plant and plant products and ensure fulfillment of international commitments, and to entrust all plant protection regulatory functions to the government and for matters incidental thereto or connected therewith. The activities of the Tanzania Pesticides Research Institute (TPRI) are incorporated into the Act.

In relation to IPM, importation of biological control agents is not allowed unless under the prescribed permit by the Ministry responsible for agriculture. The act is under review and there is a draft titled The Plant Protection Act 2013 (Draft).

2. National implementation of crop-specific, pest-specific alternatives to HHPs

Under the IPMP, several packages of IPM technologies specific to crops or pest were developed, tested and implemented.

2.1 National IPM implementations

The Ministry of Agriculture, in collaboration with GTZ, FAO and IFAD, has been implementing IPM pilot projects to promote farmer participatory integrated pest management (IPM) approaches in different parts of the country and cropping systems. The following are examples of IPM pilot projects implemented in Tanzania:

i. The GTZ/PHS-IPM

The IPM project was initiated in 1992 by the Ministry of Agriculture, namely Plant Health Services (PHS), and the German Agency for Technical Cooperation (GTZ). The IPM pilot area was the western growing zone (Shinyanga). This was an area using a lot of pesticides to reduce losses emanating from pests. The IPM project was resource

intensive, with the GTZ granting Tanzanian Shillings 500 million, which is 90% of the budget allocated for IPM implementation annually. The counterpart funding by the Ministry of Agriculture was Tanzania Shillings 50 million per annum. The project operated for 11 years under the following phases:

- Baseline and diagnostic surveys, training of counterpart staff, introducing IPM concept at farmers' level, etc. Phase I (1992-1994),
- Development, testing and dissemination of the IPM technical packages on priority crops in the pilot area of the western zone,
- Dissemination and extension of IPM technical packages to other regions in the western and northern zones, respectively: Tabora, Kigoma, Kagera, Mara, Mwanza, Arusha, Kilimanjaro, Tanga. Phase II (1997-2002), and
- Handing over and consolidating the achievements. The project came to end in September 2003. Phase IV (2003).

Spill-over and role model effects: KAEMP and MARAFIP copied the project approach.

Capacity Building: The project trained 999 VEOs/DPPOs in IPM within the project area, i.e. 697 in the western and 302 in the northern zones. The IPM project and the District Councils, through their respective support programmes, i.e. MARA-FIP, KAEMP, Care, Farmafrica, DRDPs, Faida, Ecotrust, World Vision, LVEMP, etc., jointly financed the training. The VEO have in turn trained 484,825 farmers in IPM, i.e. 421,487 in the western and 63,338 in the northern zones.

The VEOs facilitated formation of 44 IPM working groups, each with an average of 15 farmers (14 IPM groups in the western and 30 IPM groups in the northern zones). These groups were role models for IPM development, testing of recommendations, validating, implementing and disseminating.

Impacts: The extent of impact achievement with regard to the benefits of IPM such as environmental conservation, restoration of beneficial organisms, etc. has not been evaluated. The following impacts have been reported (Nyakunga 2003):

- The use of conventional pesticides in cotton in Shinyanga has been reduced from 6 calendar sprays to maximum 3 sprays without negatively affecting production. The evidence of this is the increased cotton production in the western zone from 38,000 tons in 1994/95 to 69,900 tons in 2000/01.
- Safety of users against conventional pesticides.
- The National Plant Protection Advisory Committee was instituted in line with the Plant Protection Act of 1997 and actively guided monitoring and implementation of plant protection activities in Tanzania.
- IPM has been integrated in the Agriculture and Livestock Policy as a national policy on plant protection and the ASDP has provided that IPM should be disseminated country-wide.

- ii. **Kagera Agricultural and Environmental Management Programme (KAEMP)** was a multi sectoral initiative of the Kagera region (Lake Zone) jointly funded by IFAD, BSF/JP and OPEC, with contributions from the beneficiaries. The project was implemented by Regional Administrative Secretary (RAS) Kagera and managed by the local government machinery. Its main focus was on improvement of food security and poverty alleviation, and therefore, had a holistic approach (addresses agriculture, health, livestock, environment management, rural access roads and marketing) to rural development. In this setup, IPM was embraced as the key pest management in all crops. KAEMP borrowed the IPM approach (baseline studies, group formation and training, internal M & E, etc.) from the GTZ/PHS-IPM Shinyanga project. The major crops grown in the region are cotton, coffee, banana, cassava and beans.

- iii. **Mara Region Farmer Initiative Project (MARAFIP)** is an initiative of the Mara region, and the main objective is poverty alleviation through strengthening of capacity of the local institutions to respond to farmer's felt needs related to food, agriculture and livestock. The project is organised and implemented by RAS and funded by IFAD. MARAFIP is another offspring of the GTZ/PHS-IPM project, and uses the FAO IPM-FFS approach of group training and technology transfer.

All district plant protection officers and Village Executive Officer (VEOs) were given training in IPM concepts to raise awareness about IPM to facilitate their supervisory role. Five VEOs (project staff) of selected villages for Farmer Field School (FFS) pilot groups were given one-month split course in IPM, group management and participatory technology transfer methods to provide them with the capacity to organise and conduct IPM-FFS.

iv. Mbeya: Southern Highlands Extension & Rural Financial Services Project/IFAD

This initiative started with organised extension farmer groups in 1996/97 using a modified training method to enhance technology transfer at the farm level. Essentially, the approach was still strongly based on the traditional "top-down" extension method. In 1998/99 the project introduced IPM-FFS pilots in Mbeya (focused on tomatoes, cabbage, round potatoes and wheat) and Ruvuma (focused on coffee and maize) regions. The IPM-FFS and extension groups ran parallel in the same villages.

v. IPM-FFS capacity building (IFAD/FAO initiative)

Two VEOs (master trainers) attended a 3 months course in Zimbabwe under the sponsorship of FAO. The project supervisors visited IPM-FFS groups in Kenya for two weeks to gain some basic experience on how to organise and conduct IPM-FFS. This was followed

by 2-weeks residential training course in IPM and farmer participatory methods of technology transfer for 25 VEOs in Mbeya and Mbinga districts.

The graduates reported back to their duty stations to organise and conduct IPM-FFS in their respective villages. Farmer-farmer learning through exchange visits between farmer groups and within group members was facilitated. Like in the other initiatives, organised field days and exchange visits were used to encourage spillover to non-group members.

- vi. **Morogoro Special Programme for Food Security (SPFS)/FAO Project** This was an initiative of the Ministry of Agriculture in collaboration with FAO that targets Morogoro and Kilombero districts, with a focus on maize and rice (the major crops in the area) and promotion of small livestock (poultry, milk goats and chicken).

The project started in 1996 and ended in 1998. The initiative promoted farmer participatory group approaches of technology transfer. Because this capacity was not within the project staff, training in participatory approaches was organised and provided by the Co-operative College Moshi for the project core staff (E. Shayo, personal communication).

- vii. **PHS IPM promotion activities:** Between 2003 and 2006, PHS, in collaboration with the PADEP programme, conducted a series of sensitization workshops for key policy makers in the agricultural high potential areas; facilitated the establishment of 875 FFs (21,875 farmers) in 11 regions; and designated four farmer training centres (FTCs) (Mkindu-Morogoro, Bihawana –Dodoma, Inyala-Mbeya and Ichenga-Iringa) for FFS training (Riwa 2007). In addition, the FAO supported a special programme for food security (SPFS) that established 314 FFSs (Mero 2006). TPRI conducted limited training courses for pesticide dealers, stockists and retailers and some of the course participants are officially registered with TPRI under the provisions of the PPA 1997 and Regulations 1997 (WH Riwa personal communication 2009, personal observations).

Similar initiatives were deployed in other regions like in Morogoro and Mvomero district, as shown on the Photograph 1 below.

- viii. **The GTZ-IPM project in Arusha,** in collaboration with IPM farmer groups and the extension staff, has compiled a list of useful botanical pesticides that could be used on a wide range of vegetables and other food crops, as also shown on Table 5 below.



Photograph 1: A sign showing a direction to an IPM demonstration farm in Mvomero District - Tanzania

2.2 National organic agriculture implementation

It is not clear to what magnitude organic agriculture is practiced in the country. Awareness on organic farming practices is also low.

There is a National Organic Agriculture Development Programme for Tanzania 2009-2015 Plan, which is literally known as *Mpango wa Kuendeleza Kilimo Hai Tanzania (MKUKIHATA)*. It is a comprehensive programme for the development of the organic sector. It is aligned with the National Strategy for Reduction of Poverty and the Agriculture Sector Development Programme, and has a strong focus on food security and poverty alleviation through income generation and a market-led expansion of the organic agriculture sector.

2.3 Practices based on indigenous knowledge that are being used to replace HHPs

The following are practices based on indigenous knowledge that are being used to replace HHPs in Tanzania:

- i. Use of botanicals such as marigold, lantana camara, neem leaves, pyrethrum, pepper, pawpaw leaves, use of leaves of a tree locally known as *utupa*, and peas leaves in pests and diseases control.

A list of potential plants that can be used to prepare botanical extracts for pre- and post-harvest pest control follows below (Table 5).

Table 5: List of potential plants used for botanical extracts

Kiswahili name	English name	Scientific name
Mustafeli	Soursop	<i>Annona muricata</i>
Mtopetope	Bull-oxheart	<i>A. reticulata.</i>
Mtopetope mdogo	Custard apple	<i>A. squamosa</i>
Vitunguu saumu	Garlic	<i>Allium sativa</i>
Mwarobaini	Neem	<i>Azadirachta indica</i>
Kishonanguo	Black Jack	<i>Bidens pilosa</i>
Pilipili kali	Chili	<i>Capsicum frutescens</i>
Mpapai	Pawpaw	<i>Carica papaya</i>
Mnanaa	Thorn apple	<i>Datura stramonium</i>
Mnyaa/utupa	Milk bush	<i>Euphorbia tirucalii</i>
Mchungu kaburi	Barbados nut	<i>Jatropha curcas</i>
Mwingajini	Wild sage	<i>Lantana camara</i>
Tumbaku	Tobacco	<i>Nicotiana spp</i>
Kivumbasi	Mosquito bush	<i>Ocimum suave</i>
Mbagi mwitu	Mexican marigold	<i>Tagetes spp</i>
Alizeti mwitu	Wild sunflower	<i>Tithonia diversifolia</i>
Utupa	Tephrosia	<i>Tephrosia vogelii</i>

- I. Mixed cropping that includes nitrification plants.
- II. Use of soot and cowdung grannies in storing grain for households.
- III. Scratching/ grading of Sodom apple are applied as pesticides.
- IV. Use of botanicals such as tall *khaki* weed leaves and tobacco to preserve grains.
- V. Cow's urine sprayed on tomato plants in order to protect from diseases.
- VI. Crop rotation: This practice is used to depress weeds and/insect pests and diseases in some crops. For example, *Striga* in sorghum and millet can be controlled/ reduced by planting a trap crop like groundnuts or cotton.
- VII. Intercropping: The field is used to grow two or more crops at the same time.
- VIII. Relay cropping: For example, banana is relayed with mucuna to reduce the infestation of weevils.
- IX. Fallow: The field is not cultivated for some years in order to control various parasitic weeds.

- X. Cover crops: These are leguminous crops, which are grown to suppress weeds in the field. They can be intercropped or not and they protect and cover the field, e.g. pumpkins, canavallia, etc.
- XI. Trap crops: These induce the germination of a pest. The trap crop can be intercropped or rotated with a susceptible host (e.g. groundnuts, bambaranuts, cotton, etc.).
- XII. Mulching: This is covering of crop fields by dry grasses to control weeds and conserve soil moisture (e.g. in coffee, banana, tomato field, etc.).
- XIII. Hand pulling and hoes weeding: These practices are the most common and being used by small-scale farmers.
- XIV. Fertilizer/Manure application: The application of nutrients in the form of either inorganic fertilizer or farm-yard manure reduces both the infestation of fields by weeds (e.g. Striga) and losses in crop yield.
- XV. Use of disease-free planting material, e.g. cassava cuttings, sweet potato vines, etc.
- XVI. Pruning: Done in coffee, tea orange tree etc. to reduce insect pests and diseases that might infest the crop.
- XVII. Thinning: Done to reduce plant population in the field (e.g. in maize, rice, sorghum and millet, cotton, etc.).

3. National initiatives in agroecology implementation

Some agroecology implementation was part of IPM implementation by the MoA under a programme known as Agricultural Sector Development Programme (Phase 1). Information on Technical Packages for several crops were developed and distributed to farmers and other groups. Some organizations or groups that are practicing agroecology are listed below.

3.1 Organizations that support and initiate agroecological implementations in the nation

The following are some of the organizations (all are non-governmental organizations) that support and initiate agroecological implementations in Tanzania:

- i) Sustainable Agriculture Tanzania (SAT).
- ii) Tanzania Organic Agriculture Movement (TOAM) is the national umbrella organization for the organic sector in Tanzania.
- iii) MVIWATA - National Network of Small-Farmers Groups in Tanzania.
- iv) PELUM - Participatory Ecological Land Use Management.
- v) TOFO - Tanzania Organic Foundation.

- vi) KIHATA - Kilimo Hai Tanzania (Organic Agriculture in Tanzania).

Some of these provide awareness to the public on the benefits and practices based on agroecology; an example is newspaper reporting about how the farmer who is a member of farmers network known as Mkulima Mbunifu (meaning Innovative Farmer) benefits from organic farming. The network information can be found on www.mkulimambunifu.org

Main national challenges in the implementation of agroecology in the nation:

- i) Limited support from the national policy level.
- ii) Lack of standardized doses/formula for organic and agroecology practices.
- iii) Little awareness among the community/ farmers on agroecological practices.
- iv) Limited agroecology research and dissemination of results.
- v) Sustainability, e.g. non-continuity of initiated projects/ programs/ plans.

3.2 Recommendations and project ideas emerging from the challenges

- i) More support required from policy level.
- ii) More effort from all stakeholders to promote organic and ecological agriculture.
- iii) Promote awareness among the community/ farmers on agroecological practices.
- iv) Promote agroecology research and dissemination of results.
- v) Extension/ continuity / replication and monitoring of previous efforts and projects conducted in different areas or by different stakeholders.

III. Public awareness in relation to HHPs

In addition to literature review and interviews with stakeholders, AGENDA organized a media event with the aim of urging the stakeholders particularly the policy makers on the need to take action in relation to phasing out HHPs in Tanzania. Information on this was disseminated through electronic as well as print media in both English and Kiswahili – which is the national language. Some of the information that was published on English and Kiswahili newspapers is found on <https://www.ippmedia.com/en/news/govt-cautioned-hazardous-pesticides> and <https://www.ippmedia.com/sw/habari/tpri-yatakiwa-kuondoa-viutilifu-vyenye-madhara-sokoni> respectively. Other information was broadcasted in three different radio outlets unfortunately no voice note was obtained.

References

[http://fews.net/sites/default/files/documents/reports/Tanzania MFR Summary Report August 2018.pdf](http://fews.net/sites/default/files/documents/reports/Tanzania_MFR_Summary_Report_August_2018.pdf)

[http://www.kilimohai.org/fileadmin/02_documents/EOA/NATIONAL ORGANIC AGRICULTURE DEVELOPMENT PROGRAMME FOR TANZANIA 2009-2015.pdf](http://www.kilimohai.org/fileadmin/02_documents/EOA/NATIONAL_ORGANIC_AGRICULTURE_DEVELOPMENT_PROGRAMME_FOR_TANZANIA_2009-2015.pdf)

<http://tpri.go.tz/storage/app/media/uploaded-files/Registered%20Plants%20Protection%20Substances%20for%20use%20in%20the%20United%20Republic%20of%20Tanzania.pdf>

<http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/code/hhp/en/>

<http://pesticideblog.lawbc.com/entry/fao-and-who-publish-guidelines-on-highly-hazardous-pesticides>

[https://www.researchgate.net/publication/266624015 Pesticide retailers' knowledge and handling practices in selected towns of Tanzania](https://www.researchgate.net/publication/266624015_Pesticide_retailers'_knowledge_and_handling_practices_in_selected_towns_of_Tanzania)

<http://www.nao.go.tz/management-of-pesticides-in-agriculture/>

[http://www.pan-germany.org/download/PAN HHP List 150602 F.pdf](http://www.pan-germany.org/download/PAN_HHP_List_150602_F.pdf)

<http://tpri.go.tz/storage/app/media/uploaded-files/Plant%20Protection%20Act.pdf>

<http://tpri.go.tz/storage/app/media/uploaded-files/Plant%20Protection%20Regulations1999.pdf>

<http://tpri.go.tz/storage/app/media/uploaded-files/TPRI%20Act%201979.pdf>

file:///C:/Users/USER%20PC/Downloads/pesticides_hazard_2009.pdf

Annex 1: List of HHPs among the registered plant protection substances in Tanzania (2018)

Table A1: HHPs registered and used in Tanzania

Trade name	Common name	Usage
ACARICIDES		
Supona Aerosol	Chlorfenvinphos + Dichlorvos + Gentian violet	Control of ticks, maggots and wounds on cattle
Cypertop 400EC	Cypermethrin 150g/L+ Chlorpyrifos 250g/L	Control of ticks on cattle
Supatix 330 EC	Alpha Cypermethrin 30 + Chlorpyrifos 300g g/l	Control of ticks on cattle
Vectoplus EC	Cypermethrin 15g/l + Chlorpyrifos 25g/l	Ticks
Super Dip® 55EC	Chlorpyrifos 500g/l+ Cypermethrin 50g/l	Control of cattle ticks
Merutix Super 400EC®	Chlorpyrifos 250g/l + Cypermethrin 150g/l)	Ticks control in cattle
Ecotix 100EC	cypermethrin high cis 100g/l	Control of ticks and tsetse flies on cattle
Paratraz 12.5%	Cypermethrin 125g/l	Control of ticks on cattle
Cybadip 15EC	Cypermethrin 15%	Control of ticks on tsetse flies on cattle
Cypervet® 10%EC	Cypermethrin 100g/L	Control of ticks and tsetse flies on cattle
Tantix 10EC	Cypermethrin 100g/L	Control of ticks and tsetse flies on cattle
Ecotix Pour On	High-Cis Cypermethrin	Control of ticks and tsetse flies on cattle
Vapco Cypermethrin 10 EC	Cypermethrin 100 g/l	Control of ticks on cattle
Ectoban 200EC	Cymiazole + Cypermethrin	Control of ticks on cattle
Vectocide EC	Deltamethrin 50g/l	Control of ticks and tsetse flies on cattle
Notix	Deltamethrin 500g/l	Control of ticks and tsetse flies on cattle
Deltix 2.5 EC	Deltamethrin 250g/L	Control of tsetse flies and ticks on cattle
Smash 1% Pour on	Deltamethrin 1%	Control of ticks on cattle

Drop On	Deltamethrin	Control of ticks and tsetse flies on cattle
Supona Aerosol	Chlorfenvinphos + Dichlorvos + Gentian violet	Control of ticks, maggots and wounds on cattle
Queletox 60% ULV	Fenthion 600g/l	Control of <i>Quelea quelea</i> on various crops
Topline 1% EC	Fipronil 1g/100mls	Control of cattle ticks
INSECTICIDES		
CocraKill® Paste	Boric Acid 50%w/v IN/0356	Control of cockroaches
Peropal 25 WP	Azocyclotin 25 g/Kg	Control of spider mites on roses in greenhouse and insect pests on roses
Bulldock star EC 262.5	Beta- cyflutrin 12.5g/l+Chlorpyrifos 250g/l	Control of various sucking insect on cotton and insect pests on horticultural crops
Bulldock 025EC	Beta- cyflutrin 12.5g/l	Control of <i>Helicoverpa amigera</i> , <i>aphis gossypi</i> and insect pests on cotton and horticultural crops
Talstar 100EC	Bifenthrin 100g/l	Aphids and mites
Bistar 10WP	Bifenthrin 10g/l	Control of mosquitoes
Efentrin 2.5EC	Bifenthrin 25g/l	Control of various insect pests on horticultural crops
Seizer 80SC	Bifenthrin 80g/l	Control of insect pests on horticultural crops
Talstar 10 WP	Bifenthrin 10g/l	Control of mosquitoes
Acetastar 46 EC	Acetamiprid 16g/l + Bifenthrin 30g/l	Not indicated
Superfenthrin 100EC	Bifenthrin 100g/l	Control on aphids on cabbages
Superfenthrin 25EW	Bifenthrin 25g/l	Control on aphids on cabbages
Galil 300SC	Imidacloprid 250g/l + Bifenthrin 50g/l Sc	Not indicated
Acetastar 46 EC	Acetamiprid 16g/l + Bifenthrin 30g/l	Control of aphids on cotton
Balton abamectin 18EC	Abamectin 18g/l	Control of stalk borers and mites on horticultural crop and ornamentals
Dynamec 1.8EC	Abamectin 18g/l	Control of spider mites (<i>tetranychus spp</i>) on roses
Vertigo 1.8EC	Abamectin 18g/l	Control of spider mites (<i>tetranychus spp</i>) on roses
Akrimactin 1.8EC	Abamectin 18g/l	Control of spider mites (<i>tetranychus spp</i>) on roses
Tripo 1.8EC	Abamectin 18g/l	Control of spider mites (<i>tetranychus spp</i>) on horticultural crops
Ascomec 1.8EC	Abamectin 18g/l	Control of mites on horticultural crops
Abanil 1.8EC	Abamectin 18g/l	Control of mites on horticultural crops
Agromectin 1.8EC	Abamectin 18g/l	Control of mites on horticultural crops

Multimectin Plus	Abamectin 20g/l+ Acetamiprid 100g/l	Control of mites and white flies on horticultural crops
Murvectin 1.8EC	Abamectin 18g/l	Control of spider mites (<i>Tetranychus Spp</i>) on horticultural crops
Vapcomic 1.8EC	Abamectin 18g/l	Control of spider mites (<i>Tetranychus Spp</i>) on horticultural crops
Promectin 1.8EC	Abamectin 18g/l	Control of spider mites (<i>Tetranychus Spp</i>) on horticultural crops
Bamic 20EC	Abamectin 20g/l	Control of bollworms (<i>Helicoverpa armigera</i>) and leafminers (<i>Leaucopetra spp</i>) in tomatoes
Avrimec 1.8EC	Abamectin 18g/l	Control of spider mites (<i>Tetranychus spp</i>) on roses
Devamectin 1.8EC	Abamectin 18g/l	Control of spider mites (<i>Tetranychus spp</i>) on roses
Megamectin 1.8EC	Abamectin 18g/l	Control of bollworms (<i>Helicoverpa armigera</i>) and leafminers (<i>Leaucopetra spp</i>) on cotton and vegetables
Mupamectin 1.8EC	Abamectin 18g/l	Control of spider mites (<i>Tetranychus spp</i>) on roses
Tarantula 1.8EC	Abamectin 18g/l	Control of aphids, <i>Helicoverpa Armigera</i> , <i>Lygus</i> and stink bugs on cotton and leafminers in tomato
Antario 2.4% WP	Bacillus thuringiensis 1.4% + Abamectin 0.1%	Tomato leafminer; <i>Tuta absoluta</i> (Meyrick) (Lepidoptera: Gelechiidae)
Solvigo 108 SC	Thiamethoxam + Abamectin	Against nematodes in tobacco
Sixomectine 1.8EC	Abamectin 18g/l	Control of thrips in tomatoes
Orizon 120EC	Acetamaprid 100g/l + Abamectin 20g/l	Control of thrips on onions
Zonatrac Male	Trimidlure + Abamectin 0.5%	Attract and kill fruit fly (Diptera: Tephritidae)
Bkoola Dudu Acelamectin 5% EC	Abamectin 2%W/V + Acetamaprid 3%W/V	Against tomato fruit worm (<i>Heliothisarmigera</i>) in tomatoes
Punch 1.8EC	Abamectin 18g/l	Control of aphids on sweet pepper
Snow Super 20%EC	Abamectin 10% + Emmamectin Benzoate 10%	Against thrips on onions
Abamite 2.0EC	Abamectin 20g/l	Control of spider mites (<i>Tetranychus spp</i>) on greenhouse roses
Biotrine 5% EC	Abamectin 5% g/l	Against tomato leafminer, <i>Tuta absoluta</i> in tomatoes
Biotrine 5% EC	Abamectin 50% g/l	Tomato leafminer, <i>Tuta absoluta</i> (Meyrick) (Lepidoptera: Gelechiidae)
Orthene 75% SP	Acephate 750g/Kg	Control of aphids and Lepidoptera larvae on tobacco, cotton, vegetables
Asataf 75SP	Acephate 750g/Kg	Control of aphids and Lepidoptera larvae on French beans and other

		horticultural crops
Hasafat 75SP	Acephate 750g/Kg	Control of aphids and Lepidoptera larvae on horticultural crops
Orthene 97 Pellets	Acephate 97g/Kg	Control of aphids and Lepidoptera larvae on horticultural crops
Tobeco 75SP	Acephate 750g/Kg	Control of aphids and Lepidoptera larvae on horticultural crops
Starthene 97DF	Acephate 97g/Kg	Control of aphids and Lepidoptera larvae on horticultural crops
Mocephate 75SP	Acephate 750g/Kg	Control of aphids and Lepidoptera larvae on horticultural crops
Acefarm 25 EC	Acephate 25g/L	Control of aphids and thrips on roses, French beans and other horticultural crops
Rufast 075EW	Acrinathrin 75g/L	Control of spidermites on roses
Zapit	S-bioallethrin + bioresmethrin	Control of mosquito
Sevin Dududust 7.5%	Carbaryl 7.5%	Control of household pests (bedbugs, cockroaches, etc.)
Dudukill 51D	Labdacyhalothrin 1g/kg + Carbaryl 50g/kg	Control of ectoparasites in animals and mites
Bakiller 5.1Dust	Carbaryl (5%w/w) + Labdacyhalothrin (0.1%w/w)	Control of cockroaches
Ultravin® Dudu Dust	Permethrin + Carbaryl	Control of household pest
Sapa Carbaryl 5% D	Carbaryl 5g/kg	Control of cutworms and beetles, animal ectoparasites, mosquitoes and cockroaches.
Sapa Carbaryl 85WP	Carbaryl 85g/kg	Control of chewing and sucking pests on cotton
Sevin 85 WP	Carbaryl 85g/kg	Control of cutworms and beetles, animal ectoparasites, mosquitoes and cockroaches
Akheri Powder	Carbaryl + Cyhalothrin	Control of household insects on dogs, cats
Marshal 250EC	Carbosulfan 250g/L	Control of aphids and mites on roses
Masta 25 % EC	Carbosulfan 250g/L	Control of various insect pests on horticultural crops
Marshal 350ST	Carbosulfan 350g/l	Seed dressing
Shark 250EC	Carbosulfan 250g/L	Control of thrips on onions
Wilcron Super 250EC	Carbosulfan 250g/L	Control of thrips on onions
Snow Soldier 250 EC	Carbosulfan 250g/l	Thrips (thrips tabaci lindeman)
Sheriff 250EC	Carbosulfan 250g/l	Control of aphids on tomatoes
Coragen® 20 SC	Chlorantraniliprole 200 g/L	Control of diamondback moth (DBM), Plutella Xylostella Cabbages

Tutaprid 240SC	Chlorfenapyr 240g/L	Control of leafminers (Tuta Absoluta) on tomatoes
Dursban 4E	Chlorpyrifos 480g/L	Chewing and sucking insect, mosquito and subterranean termites control
Bulldock Star EC 262.5	Beta-Cyfluthrin 12.5g/L + Chlorpyrifos 250g/L	Control of various sucking insects, cotton and insect pests on horticultural crops
Gladiator 4TC	Chlorpyrifos 480g/l	Control of subterranean termites
Subachlo 48EC	Chlorpyrifos 480g/L	Control of fruitworm on tomatoes
Keshet Super 312EC	Deltamethrin + Chlorpyrifos	Control of webworm (Hellula undalis) on cabbage; African Bollworm (Helicoverpa Armigera Hubner) on cotton
Antokil 5EC	Chlorpyrifos 50g/L	Control of fruit worm on tomatoes
Lambdex Super 315EC	Lambdacyhalothrin 15g/l + Chlorpyrifos 300g/l	Control of cotton, roses, Helicoverpa armigera and aphid gossypii on cotton, tomatoes
Pyrinex Quick 256ZC	Deltamethrin 6+ Chlorpyrifos 250g/l	Control of cabbage webworm on cabbage
Cyclone 505EC	Cypermethrin 10g/L+ Chlorpyrifos 35g/L	Control of various insect pests on roses
Dasba 40EC	Chlorpyrifos 400g/L	Control of fruit worm on tomatoes
Dudual 450EC	Cypermethrin 150g/L+ Chlorpyrifos 300g/L	Control of cabbage webworm (hellula undalis) on cabbage and sucking insect pests on cashew and major insect pests in cotton
Dasba 48EC	Chlorpyrifos 480g/L	Control of fruit worm on tomatoes
Vitashield 24ULV	Chlorpyrifos 240g/L	Control of fruit worm on tomatoes
Vitashield 48EC	Chlorpyrifos 480g/L	Control of fruit worm on tomatoes
Herelle 55EC	Chlorpyrifos + 500g/L Cypermethrin 50g/L	Control of various insect pests in cotton
Nurelle D50/500EC	Cypermethrin 50g/L + Chlorpyrifos 500g/L	Control of American Bollworms, aphids, Jassids, and cotton stainers on cotton
Subachlo Plus 55EC	Chlorpyrifos + 500g/L Cypermethrin 50g/L	Control of Heliothis Armigera and sucking bugs (Helopeltis Anacardii, Pseudotheraptus Wayi) on cashew fruitworm on tomato and aphids on cotton
Farmrifos 48EC	Chlorpyrifos 480g/L	Control of various Insect pests on French beans, tomatoes and roses
Darsfarm 240EC	Chlorpyrifos 240g/L	Control of bollworms and aphids on tomatoes
Twigaphos 48EC	Chlorpyrifos 480g/L	Control of scales on coffee
Royalnex 25SC	Chlorpyrifos 250g/L	Control of various insect pests on horticultural crops

Ascoris 48EC	Chlorpyrifos 480g/L	Control of insect pests on horticultural crops
Popo 480EC	Chlorpyrifos 480g/l	Control of insect pests on horticultural crops
Propyrifos 48SL	Chlorpyrifos 480g/L	Control of insect pests on horticultural crops
Mo-Durs 48EC	Chlorpyrifos 480g/L	Control of various insect pests on horticultural crops
Duduba 450EC	Cypermethrin 100g/l + chlorpyrifos 350g/l	Control of webworm (Hellula undalis) on cabbage; African Bollworm (Helicoverpa Armigera Hubner) on cotton and sucking bugs on cashew
Colt 48EC	Chlorpyrifos 480g/l	Control of termites
Strakle 20 SG	Chlorpyrifos 500g/l + Cypermethrin 100g/l	Control of cabbage sawfly (Athalia spp) on cabbage
2-Kick 55 EC	Chlorpyrifos 500g/L Cypermethrin 50g/L	Control Of tomato fruit worm (Heliothis Armigera) in tomato and sucking bugs (Helopeltis Anacardii, Pseudotheraptus Wayi) on cashew
Chlorotop 480EC	Chlorpyrifos 480g/l	Control of cabbage webworm (Hellaunda lis) on cabbage
Suraban 480EC	Chlorpyrifos 480g/l	Control of aphids on roses
Termite Killer 480EC	Chlorpyrifos 480g/L	Control of termites on timber
Forstrike Extra 550EC	Cypermethrin 50g/L + Chlorpyrifos 500g/L	Control of aphids on cabbage
Snow Storm 48 EC	Chlorpyrifos 480 g/L	Control of cabbage webworms on cabbage
Sulban Plus 450 EC	Labdacyhalothrin 150g/L Chlorpyrifos 300g/L	Control of thrips on onions
Duduwill 315EC	Chlorpyrifos 300g/l + Labdacyhalothrin 15g/l	Control of thrips on onions
Agrosban 480 EC	Chlorpyrifos 480g/L	Control of fruit worm on tomatoes
Ladex 350ZW	Labdacyhalothrin 250g/l + Chlorpyrifos 100g/l	Control of major insect pests of cotton
Sixoryfos 480EC	Chlorpyrifos 480g/L	Control of aphids on cabbage
Actforce Gold 480EC	Chlorpyrifos 480g/L	Control of thrips on onions
Robocop 480TC	Chlorpyrifos 480g/L	Timber treatment against destroying organism (includes subterranean termites, dry wood termites, damp wood termites, beetles- typically powder post beetle)
Strike 55%EC	Chlorpyrifos + Cypermethrin	Control of aphids on cabbages
Vitafos 480SL	Chlorpyrifos 480g/l	Against thrips in onions
Supermix 450 EC	Cypermethrin 100g/L + Chlorpyrifos 350g/L	Against tomato fruit worm (Heliothisarmigera) in tomatoes
Pyrigran 75%WG	Chlorpyrifos 750g/Kg	Control of DBM on cabbages
Judwa 55WG	Chlorpyrifos 500g/l+ Cypermethrin	Control of aphids (primarily Myzus

	50g/l	persicae) and mites in sweet pepper
Fighter 505EC	Chlorpyrifos 500g/l + Cypermethrin 5.g/l	Against thrips in onions
Dursban 24ULV	Chlorpyrifos 240g/l	Control of chewing and sucking pests and on public health for mosquito control
Sumishield 50%WDG	Clothianidin 50.0% w/w	For mosquito control
Mortein Doom Fast knockdown Cockroach & Ant killer	Cypermethrin + Imiprothrin + d-allethrin	Control of crawling and flying insects
Fighter Aerosol	Cypermethrin + d-Tetramethrin	Control of mosquitoes & cockroaches
Kombora Aerosol	Tetramethrin + Cypermethrin	Control of mosquito
Mortein Doom Fast Knockdown CIK	Imiprothrin 0.03%w/w Cypermethrin 0.15% w/w	Control of crawling and flying insects
Amekan C 344EC	Cypermethrin 144g/L + Imidacloprid 200g/L	Control of America Bollworms, aphids, jassids, and cotton stainers on cotton
Duducyper 5EC	Cypermethrin 50g/L	Control of cabbage webworm (hellula undalis) on cabbage
Farmguard 344SE	Cypermethrin 144g/l + imidacloprid 200g/l	Control of bollworms and aphids on tomatoes
Golden Pro 440EC	Profenofos 400g/L + Cypermethrin 40g/L	Control of various insect pests on horticultural crops
Ester Extrim 20 SL	Acetamiprid 100g/l + Cypermethrin 100g/l	Control of insect pests on horticultural crops and major cotton pests
Godrej Hit Aerosol	Imiprothrin, Cypermethrin, Prollethrin	Control of mosquitoes and cockroaches
Polytrin P 440 EC	Profenofos 400g/L + Cypermethrin 40g/L	Control of various insect pests on horticultural crops
Closupa 450EC	Chlopyriphos 300g/L + Cypermethrin 150g/L	Control of insect pests on horticultural crops
Topyrithrin 505 EC	Chlorpyriphos 500g/l + Cypermethrin 50g/l	Control of various insect pests on horticultural crops
ImidaC 344EC	Cypermethrin 144g/L + Imidacloprid 200g/L	Control of various insect pests on various crops
Rapid-Attack 344EC	Cypermethrin 144g/L + Imidacloprid 200g/L	Control of various insect pests on horticultural crops and insect pests in cotton
Conquest C176 EC	Acetamiprid 32g/l + Cypermethrin 144g/l	Against Helicoverpa armigera and aphids gossypii for cotton
Famipro	Cypermethrin + Propoxur	Control of mosquito
Power Plus 550EC	Cypermethrin + Profenofos	Control of fruit worm (heliiothis armigera) on tomatoes
Sharlin 186EC	Cypermethrin 36g/l + Profenofos	Control of American Bollworms,

	150g/l	aphids, jassids, and cotton stainers on cotton.
Prosper 720EC	Cypermethrin 120g/L + Profenofos 600g/L	Control of aphids, thrips on roses, French beans
Metakan Super 350SE	Imidachloprid 200g/l + Cypermethrin 150g/l	Control of cabbage sawfly (<i>Athalia spp</i>) on cabbage and aphids on tobacco
Tanzapana 344SE	Cypermethrin 144 g/l + Imidacloprid 200 g/l	Control of aphids on cabbage
2-Kick 55 EC	Chlorpyrifos 500g/L Cypermethrin 50g/L	Control of tomato fruit worm (<i>Heliothis Armigera</i>) in tomato and sucking bugs (<i>Helopeltis Anacardii</i> , <i>Pseudotheraptus Wayi</i>) on cashew
Excel Crush 55EC	Chlorpyrifos 500g/l + Cypermethrin 50g/l	Control of aphids on cabbage
Cyperpro 440EC	Cypermethrin 40g/l + Profenofos 400g/l	Control of American Bollworms, aphids, jassids, and cotton stainers on cotton
Hit Aerosol	Cypermethrin + Prallethrin + Piperonyl Butoxide	Control of mosquitoes
Hitcel 440EC	Profenofos 400g/l+ Cypermethrin 40g/l	Control of fruit worm (<i>Heliothis armigera</i>) on tomatoes
Supa Cyper 10 EC	Cypermethrin 100g/L	Control of aphids on cabbage
Risasi Fenitrothion 1.2%	Cypermethrin 0.2% + Tetramethrin 0.4% + Fenitrothion 1.2%	Control of mosquitoes
Risasi Propoxur 0.2%	Fenitrothion 1 % + Cypermethrin 0.2% + Tetramethrin 0.4% + Propoxur 0.2%	Control of mosquitoes
Snow Plus 550EC	Profenofos 500g/L+ Cypermethrin 50g/L	Control of thrips on onions
Kifaru 440 EC	Profenofos 400 G/L + Cypermethrin 40 G/L	Control of aphids on roses
Dual Power 344SE	Cypermethrin 144g/L + Imidacloprid 200g/L	Control of aphids on cabbage
Cyperstar 440EC	Profenofos 400g/l + Cypermethrin 400g/l	Control of thrips on onions
Viraat 230EC	Cypermethrin 200g/l + Quinalphos 30g/l	Control of aphids on cabbage
Snow Cyper 20EC	Cypermethrin 200g/L	Against whiteflies and aphids
Shooter 650 SI	Acetamiprid 150g/L + Cypermethrin 500g/L	Control of thrips on onions
Dudu Plus 55EC	Profenofos + Cypermethrin, 550EC	Control of aphids on cabbages
Fenos 440 EC	Profenofos 400g/l + cypermethrin 40g/l)	Against tomato fruit worm (<i>Heliothisarmigera</i>) in tomatoes

Ironforce 44 % EC	Profenos 400g/l + Cypermethrin 40g/l	Mites control in tomatoes
Cyfos 44 EC	Profenos 400g/l + Cypermethrin 40g/l	Control of DBM on cabbages
Maxi Aerosol	Tetramethrin 0.325% + Propoxur 1 % + Cypermethrin 0.11%	For mosquito control
Rungu Aerosol	Tetramethrin 0.325% + Propoxur 1 % + Cypermethrin 0.11%	For mosquitoes and cockroach control
Fenom C 170 ULV	Profenofos +Cypermethrin	Control of jassids calidea and judgus on cotton
Cypercal D15/120ULV	Cypermethrin 120g/l + Dimethoate 15g/l	Control of aphids, whitefly, caterpillars and hemiptera on cotton
Cypercal 1.8ULV	Cypermethrin 18g/l	Control of American bollworms and aphids on cotton
Raid IT	Tetramethrin + Cypermethrin +Propoxur	Control of mosquitoes
Supakill	Pyrethrin+ Cypermethrin + Tetramethrin	Control of mosquitoes
Zap aerosol	tetramethrin+ Cypermethrin	Control of mosquitoes
Attakan C 344 SE	Cypermethrin 144g/l + Imidacloprid 200g/l	Control of bollworms and sucking pests in cotton
Decis 25EC	Deltamethrin 25g/L	Control of chewing insect pests on various crops
Keshet 2.5EC	Deltamethrin 25g/L	Control of stalk borers and various insect pest on vegetables, horticultural crops
Deltapaz 2.5 EC	Deltamethrin 25g/L	Control of stalk borers on maize
Shumba Super Dust	Fenitrothion 1% + Deltamethrin 0.13%	Control of P. Truncatus (Larger Grain Borer) and weevils (Sitophilus zeamais) on maize storage
Permanet® 2.0	Deltamethrin	Control of mosquitoes by treated net
Deltra 2.5EC	Deltamethrin 25g/L	Control of fruitworm in tomato and Helicoverpa armigera and Aphis gossypi on cotton
K-O tab 1,2,3	Deltamethrin	Control of mosquitoes
Bamethrin 2.5EC	Deltamethrin 25g/L	Control of aphids, African Bollworm (Helicoverpa Armigera Hubner) on horticultural crops, tobacco, cotton and control of tobacco pests
Icon Life	Deltamethrin	Control of mosquitoes by treated net

Netto Mosquito Net	Deltamethrin	Control of mosquitoes
Pali 2.5%WP	Deltamethrin 25g/K	Control of mosquitoes
Pali 25WT	Deltamethrin 25g/K	Control of mosquitoes
Bamethrin 0.5ULV	Deltamethrin 5g/L	Control of America Bollworms on cotton
Mosfly Aerosol	Tetramethrin + Permethrin + Deltamethrin	Mosquito control
Decis Forte 100EC	Deltamethrin 100g/L	Control of various insect pests on horticultural crops
Atom 2.5EC	Deltamethrin 25g/L	Control of Various Insect pests on Horticultural Crops
Shastra 2.5EC	Deltamethrin 25g/L	Control of Insect pests on horticultural crops
Delfarm 2.5EC	Deltamethrin 25g/L	Control of Various Insect pests on Horticultural Crops
Wilcis 2.5 EC	Deltamethrin 25g/L	Control of various Insect pests on horticultural crops
Deltraplus 25EC	Deltamethrin 250g/l	Control of American bollworms on cotton
Tammer 25WG	Deltamethrin	Control of Mosquitoes
Shamba Powder 113DP	Fenitrothion 1% + Deltamethrin 0.13%)	Control of P. Truncatus (Larger Grain Borer) and weevils (Sitophilus zeamais) on maize storage
Simba Power	Fenitrothion 1% + Deltamethrin 0.13%	Control of Larger Grain Borer and weevil (Sitophilus zeamais) on maize
K-othrine WG250	Deltamethrin	Mosquito control
Modeci 25 EC	Deltamethrin 25g/l	Control of Various Insect pests on Horticultural Crops
Devadelta 2.5% E.C	Deltamethrin 25g/l	Control of Helicoverpa armigera (Colleoptea: noctuidae) (Hubner) and Aphis gossypii (Homoptera: aphididae) (Glover) on cotton
Netprotect Bednets®	Deltamethrin	Control of Mosquitoes
Mupadust 113DP	Fenitrothion 1% Plus Deltamethrin 0.13%)	Control of P. Truncatus (Larger Grain Borer) and weevils (Sitophilus zeamais) on storage
Elthrin 25Tab	Deltamethrin 25g/L	Control of fruit worms (heliiothis armigera) on tomatoes
PermaNet Lining	Deltamethrin	Tsetse fly
Lifenet (LLIn)	Deltamethrin 60mg/m2	Control of Mosquitoes by treated net

Delta Supa 2.5% EC	Deltamethrin 25g/L	Control of Fruit Worm on tomatoes
Shumba Supermax EC50	Pirimiphos Methyl 50% + Deltamethrin 50%)	Control of larger grain borer (<i>Prostephanus truncatus</i>) and weevils (<i>Sitophilus zeamais</i>) on maize storage
Shumba Extra Dust 11.3DP	Pirimiphos Methyl 10g/Kg And Deltamethrin 1.3g/Kg	Control of larger grain borer (<i>Prostephanus truncatus</i>) and weevils (<i>Sitophilus zeamais</i>) on maize storage
Extra Super Dust 113DP	Fenitrothion 1% + Deltamethrin 0.13%	Control of larger grain borer (<i>Prostephanus truncatus</i>) and weevils (<i>Sitophilus zeamais</i>) on maize
Noirhit Aerosol	Deltamethrin 0.015% tetramethrin 0.2% + Permethrin 0.3%	Control of Mosquitoes
Delta Tab	Deltamethrin 25%	Control of Aphids on cabbage
Kiboko Grain Dust 2.5% DP	Fenitrothion 12g/Kg + Deltamethrin 13g/Kg	Control of larger grain borer (<i>Prostephanus truncatus</i>) and weevils (<i>Sitophilus zeamais</i>) on maize
Canine Plus Dust 113DP	Fenitrothion 1g/Kg + Deltamethrin 1.3g/Kg	Control of larger grain borer (<i>Prostephanus truncatus</i>) and weevils (<i>Sitophilus zeamais</i>) on maize storage
Deuce 2.5EC	Deltamethrin 25g/l	Control of <i>Helicoverpa armigera</i> (Lepidoptera: Noctuidae) (Hubner) and <i>Aphis Gossypii</i> (Homoptera: Aphididae) (Glover) on cotton
Zerofly® Livestock Insecticide Incorporated Screen (Zf®L)	Deltamethrin	Control of Tsetse Flies, Houseflies And Other Diptera on cattle
Permanet LLITN	Deltamethrin 6.8g/kg	Control of Mosquitoes
K-Obiol DP2	Deltamethrin 0.2%	<i>P. truncatus</i> (Larger Grain borer), <i>S. zeamais</i> (Maize weevil) and other primary storage insect pests
Mlundalunda 25 EC	Deltamethrin 250g/L	sucking Pests such as aphids
Equdust 1.13 % Dust	Fenitrothion 1.0% + Deltamethrin 0.13%	Against <i>P. Truncatus</i> (Larger Grain Borer), <i>S. Zeamais</i> (Maize Weevil)
Dawa Plus 2.0 Nets	Deltamethrin 250g/L	For Mosquitoes control
Zerofly Bags	Deltamethrin 0.4%	Against <i>P. Truncatus</i> (Larger Grain Borer), <i>S. Zeamais</i> (Maize)
MOFIX, 250 WG	Deltamethrin 250g/Kg	For Mosquitoes control
Fendel 1.13% Dust	Fenitrothion 1.0% + Deltamethrin	Against <i>P. Truncatus</i> (Larger Grain

	0.13%	Borer), <i>S. Zeamais</i> (Maize Weevil)
Decitab	Deltamethrin 25%	Control of <i>Heliothis armigera</i> larvae on cotton
Ngao (K-Otab)	Deltamethrin	Control of Mosquitoes
K-Othrine WP	Deltamethrin	Control of mosquito by Bednet impregnation
K-Othrine Mostiquarine 1% SC	Deltamethrin	Control of Mosquitoes
Mavuno Super Dust	Fenitrothion 1.0g/kg + Deltamethrin 0.13%g/kg	Control of larger grain borer (<i>Prostephanus truncatus</i>) and weevils (<i>Sitophilus zeamais</i>) on maize
Paretas 2.5EC	Deltamethrin 25g/l	Control of Fruit Worm on tomatoes
Pegasus 500SC	Diafenthuron 500g/L	Control of Spidermites and Aphids on roses
Efenthuron 500SC	Diafenthuron 500g/L	Control of Bollworms and aphids on tomatoes
Mercur 500SC	Diafenthuron 500g/L	Control of Various Insect pests on Horticultural Crops
Tenthuron 500 SC	Diafenthuron 500g/L	Control of Various Insect pests on Horticultural Crops
Diazol 50EC	Diazinon 500g/L	Control of Diamond backmoth (DBM) and insects pests on horticultural crops
Agro-Zinon 60EC	Diazinon 600g/L	Control of Various Insect Pests on horticultural Crops
Nogozone 60 EC	Diazinon 600g/L	Control of Various Insect pests on Horticultural Crops
Bullet 600 EC	Diazinon 600g/L	Control of Various Insect pests on Horticultural Crops
Ascozinon 60 EC	Diazinon 600g/L	Control of Various Insect Pests on Horticultural Crops
Toption 60 SC	Diazinon 600g/L	Control of Various Insect pests on Horticultural Crops
NK Diazinon 60EC	Diazinon 600g/L	Control of Ectopara- sites, chewing and sucking insects on livestock
Sapa Diazinon 60 EC	Diazinon 600g/L	Control of Chewing and sucking pests on Coffee, tobacco, rice and sugarcane
Neocidal 600EW	Diazinon 600g/L	Control of bedbugs and body lice
Mukpar-Dimethoate 40EC	Dimethoate 400g/l	Control of Whiteflies on tomatoes
Ogor 40EC	Dimethoate 400g/l	Control of various insect pests on Roses
Dume 40EC	Dimethoate 400g/l	Control of Various Insect Pests on

		tomatoes
Dudu-ethoate 40EC	Dimethoate 400g/l	Control of White flies (Bemisia Tabaci) on roses
Sume 40EC	Dimethoate 400g/l	Control of Whiteflies (Bemisia Tabaci) on roses
Twigathoate 40EC	Dimethoate 400g/l	Control of Whiteflies on tomatoes
Alfadom 450EC	Dimethoate 400g/L + Alphacypermethrin 50g/L	Control of Various Insect pests on Horticultural Crops
Prothoate 40EC	Dimethoate 400g/l	Control of Various Insect pests on Horticultural Crops
Terminate 40EC	Dimethoate 400g/l	Control of various Insect pests on horticultural crops
Agrithoate 40EC	Dimethoate 400g/l	Control of Various Insect Pests on Horticultural Crops
Dimefarm 40 EC	Dimethoate 400g/l	Control of Various Insect pests on Horticultural Crops
Dimate 40 EC	Dimethoate 400g/L	Control of Various Insect Pests on Horticultural Crops
Digoz 40% EC	Dimethoate 400g/l	Control of various Insect pests on horticultural crops
Fezmet 40EC	Dimethoate 400g/L	Control of Diamondback Moth (Plutella Xylostella) on cabbage
Dimeforce 40EC	Dimethoate 400g/L	Control of DBM (Diamond Back Moth (Plutella Xylostella L.) on cabbages
Sixodime 40EC	Dimethoate 400 g/l)	Control of Aphids on Roses
Mission 415EC	Alphacypermethrin 15g/L + Dimethoate 400g/L	Control of DBM (Diamond Back Moth (Plutella Xylostella L.) on cabbages
Magicforce 31.5% EC	Lambda-Cyhalothrin 15g/l + Dimethoate 305g/l	Control of Aphids on okra
Hangthoate 400 EC	Dimethoate 400 g/l)	Control of Aphids on Roses
Sapa Dimethoate 40 EC	Dimethoate 400g/l	Control of Aphids and mites on various crops.
Dimepaz 40EC	Dimethoate 400g/l	Control of Stalk borers on maize
Callidim 400EC	Dimethoate 400g/l	Control of Whiteflies in tomatoes
Starkle 20 SG	Dinotefuran 200g/Kg	Control of Aphids on cabbage
Dino 200 SG	Dinotefuran 200g/Kg	Control of Aphids on cabbage
Trebon 30EC	Etofenprox 300g/l	Control of Aphids, Thrips on French Beans, and Roses
Vectron [®] 20WP	Etofenprox 200 g/l	Mosquito control

Nemacur 400 EC	Fenamiphos 400g/L	Control of Various Insects Pests on Horticultural Crops
Torque 550 SC	Fenbutatin-oxide 550g/L	Control of Various Insects Pests on Horticultural Crops
Sapa Fenitrothion 50EC	Fenitrothion 500g/L	Chewing and sucking pests
Sumicombi 1.8 D	Fenvalerate + Fenitrothion	Control of Chewing and Sucking insects on maize and various crops.
Hatari Aerosol	Fenitrothion +Tetramethrin	Control of flying and crawling insects
BigTox Aerosol	Fenitrothion + Permethrin	Control of Mosquito
Shumba Super 50EC	Fenitrothion 500g/l	Control of P. Truncatus (Larger Grain Borer) and weevils (Sitophilus zeamais) on storage
Kiboko Yao Aerosol	Tetramethrin + Permethrin + Fenitrothion	Control of Mosquitoes
Venithion 50EC	Fenitrothion 500g/L	Control of Aphids on Cabbages
Thioba 96ULV	Fenitrothion 960g/l	on tomato Red Locust on various crops
Novathion 500 EC	Fenitrothion 500g/L	Control of Leaf miner, chewing and sucking pests on coffee
Kiboko Aerosol	Fenitrothion	Control of Mosquitoes, cockroaches and other household insect pests
Lebaycid 50% EC	Fenthion 500g/l	Control of Chewing and sucking insects, termites and ants on various crops
Fenkil 20EC	Fenvalerate 20g/L	Control of Cotton against chewing & sucking insect pests on cotton
Kotkil 200EC	Fenvalerate 200g/L	Control of fruitworm on tomato and Helicoverpa armigera and Aphis gossypi on cashew
Fipronil 50SC	Fipronil 50g/l SC	Control of Various Insect pests on Horticultural Crops
Akheri Spray,	Fipronil 0.025%	Control of Mosquitoes
Akheri Super Dust,	Fipronil 0.025%	Control of Mosquitoes
Viper 200SC	Fipronil 200g/L	Control of Aphids, Helicoverpa Armigera, Lygus And Stink Bugs on cotton
Legend 200SC	Fipronil 200g/L	Control of Diamondback Moth (Plutella Xylostella on cabbage
Forconquer 5 SC	Fipronil 50g/L	Control of aphids on cabbages

Fiprox 80% SC	Fipronil 80%	Control of Aphids in cabbages
Adonis 12.5 ULV	Fipronil 125g/l	Control of Desert locusts on various crops
Nissorun 10% Ec	Hexythiazox 100g/L	Control of Various Insect pests on Horticultural Crops
Exyzox 10EC	Hexythiazox 100g/l	Control of Various Insect pests on Horticultural Crops
Arsur 10 EC	Hexythiazox 100g/l	Control of Various Insect pests on Horticultural Crops
Confidor 200SL	Imidacloprid 200g/l	Control of Aphids and Various insects pests on Horticultural and roses
Gaucho Fs 350	Imidacloprid 350g/l	Control of Sesame flea beetle on Horticultural Crops
Attakan 350 SC	Imidacloprid 350g/l	Control of aphids on roses and Horticultural crops
Kohinor 200SL	Imidacloprid 200g/ L	Aphids and Various insects pests
Mida 200SL	Imidacloprid 17.8%	Control of Various Insect Pests on tomatoes
Dimiprid 200SL	Imidacloprid 200g/l	Control of Aphids on cabbage
Subaprid 200EC	Imidacloprid 200g/L	Control of Various Insect Pests on beans
Subaprid 350SC	Imidacloprid 350g/L	seedling pests on wheat
Septer 200SC	Imidacloprid 200g/l	Control of Various Insect pests on Horticultural Crops
Thunder 145 OD	Imidaclopride 100g/l + Betacyfluthrine 45g/L	Control Of various Insect Pests On Horticultural Crops and Maize Lethal Necrosis Diseases (MLND) on maize
General 200SC	Imidacloprid 200g/L	Control of aphids, Helicoverpa Armigera, Lygus And Stink Bugs on Cotton and leaf miners on tomato
Buffalo 450OD	Betacyfluthrin 150 + Imidacloprid 300g/l	Control of Insect pests on horticultural crops
Concord 200EC	Imidacloprid 200g/l	Control of Various Insect Pests on Horticultural Crops
Supaclop 200SL	Imidacloprid 200g/l	Control of Various Insect Pests on horticultural crops
Imidagold 200SL	Imidacloprid 200g/l	Control of Various Insect Pests on horticultural crops
Murcloprid 25WP	Imidacloprid 250g/Kg	Control of Various Insect pests on Horticultural Crops
Target 70 WDG	Imidacloprid 700g/Kg	Control of various Insect pests on Horticultural Crops
Imax 700WG	Imidacloprid 700g/Kg	Control of Insect pests on horticultural
Midash 35%SC	Imidacloprid 350g/l	Control of Tomato fruit borer – Helicoverpa armigera on tomatoes

Tunza 700WS	Imidacloprid 700g/Kg	Control of Various Insect Pests on Horticultural Crops
Hotshot 70 WG	Imidacloprid 700g/Kg	Control of Various Insect pests on Horticultural Crops
Moprid 200 SL	Imidacloprid 200g/l	Control of Various Insect pests on Horticultural Crops
Pilarking 200 SL	Imidacloprid 200g/l	Control of Aphids on cabbage
Pronto 70WG	Imidacloprid 700g/kg	Control of Aphids on cabbage and Tobacco
Tanpride 70WG	Imidacloprid 70 WG	Control of fruit borer - Helicoverpa armigera on tomato and insect pests on tobacco
Imidacel 200SL	Imidacloprid 200g/l	Control of Aphids on cabbage
Bamidacy 70WDG	Imidacloprid 700g/l	Control of Sucking Pests Such as Aphids on tobacco
Formidaprid 200SL	imidacloprid 200g/L	Aphids on cabbage
Formidaprid 700WG	imidacloprid 700g/Kg	Control of Aphids on cabbage
Midox 700 WG	imidacloprid 700g/Kg	Control of Aphids on cabbage and tobacco
Subaprid 70WG	Imidacloprid 700g/Kg	Control of Sucking Pests Such as Aphids on tobacco
Tutabuta 350SL	Imidacloprid 350g/l	Aphids
Protector 700 WG	Imidacloprid 700g/Kg)	Aphids
Protreat 350 FS	Imidacloprid 350g/l	Control Aphids & Thrips on maize
Twigaprid 30.5% SC	Imidacloprid 30.5%	<i>Not indicated</i>
Nyati 100 OD	Imidacloprid 7.5% + Betacyfuthrin 2.5%	Control of Aphids on onions
Imiforce 200 SL	Imidacloprid 200g/l	Control aphids on Common beans (phaseolus vulgaris)
Snow Angel 30%DS	Imidacloprid 10%+ Thiram 10%+ Metalaxyl 10%	Control of Maize Stalk-Borer in maize
Callipar 700 WG	Imidacloprid 700 g/Kg	Control of Aphids (Brevicoryne Brassica) in Cabbage and Roses
Bravo 20EC	Imidacloprid 200g/l	Against thrips in onions
Clear Gel Bait	Imidacloprid 21.5%	Cockroaches control
Suscon Maxi 50GR	imidacloprid 50g/kg	control of whitegrubs in sugarcane
Misaga 70 WG	Imidacloprid 700g/Kg	Sucking And Soil Pests (Aphids, flea beetle Thrips and worms)
Confidor 010 ULV	Imidacloprid 10g/L	Control of Locust and Migratory grasshoppers on various crops
Mortein Doom Fastkill All insect Killer	Phenothrin 0.1% + Imiprothrin 0.04%	Control of Crawling and flying insects
Mortein Doom Ultra Fast AIK	Imiprothrin 0.025% + Permethrin 0.125% + Esbiothrin 0.04%	Control of Mosquito control
Mortein Doom with	Imiprothrin + D'transallethrin +	Control of Mosquito and cockroaches

Dettol Germstop	D'phenothrin	
Mortein Doom Ultra fast AIK Odourless	imiprothrin 0.025%,permethrin 0.04%, and Esbiothrin 0.125%	Control of Mosquito control
Power Gard (Aik)	Esbiothrin 0.1%+d- phenothrin 0.03% +Imiprothrin 0.02%	Control of Mosquitoes and Cockroaches
Avaunt 150EC	Indoxacarb 150g/L	Control of Various Insect Pests on Horticultural Crops
Toxacarb 150 SL	Indoxacarb 150g/L	Control of Various Insect Pests on Horticultural Crops
Harvest 150 EC	Indoxacarb 150g/l	Control of Various insects pests on Brassicas, Snow Peas and ornamentals
Emacet Extra 48%EC	Emamectin 40.0% + Indoxacarb 8%	Control of Moth (Plutella Xylostella) on cabbage
Amsac 14.5EC	Indoxacarb 140.5g/L	Control of Helicoverpa Armigera, A gossypiion cotton
Crotale 46 SC	Indoxacarb 30 g/l + Acetamiprid 16 g/l	Control of aphids on cabbages
Liberate 200EC	Emamectin Benzoate 40g/Lt + Indoxacarb	Control of Tuta Absoluta And Other Vegetable Insect Pest in horticultural crops
Promise 14.5 SC	Indoxacarb 145g/l	Control of DBM (Diamond Back Moth) on cabbages
Snowcarb 150 SC	Indoxacarb 150g/Lt	Against thrips in onions
Karate 5EC	Lambdacyhalothrin 50g/l	Control of Bollworms, aphids, sucking bugs on Cotton and Cashew
Karate 5 SC	Lambdacyhalothrin 50g/l	Bollworms, aphids
Helarat 5EC	Lambdacyhalothrin	Control of Helicoverpa armiger, aphids gossypii on cotton
Fenom Plus 315EC/ULV	Profenofos + 300g/L Lambdacyhalothrin 15g/L	On cotton Various insect pests, sucking bugs on Cotton and Cashew.
Lambdocal 50EC	Lambdacyhalothrin	Control of America Bollworms on tobacco
Icon 10CS	Lambdacyhalothrin 100g/l	Control of Mosquitoes
Lambdex 5EC	Lambdacyhalothrin 50g/l	Control of Various Insects pests and aphids on Cotton, Roses
Insectido 5EC	Lambdacyhalothrin	Control of insect pests on cotton and insect pests on cashew
Reeva 5EC	Lambdacyhalothrin 50g/l	Control of Various Insect Pests on roses
KungFu 5EC	Lambdacyhalothrin 50g/l	Control of insect Pests In tomatoes/ roses and sucking bugs (Helopeltis Spp, P.Wayi) on Cashew
Icon Maxx 10CS	Lambdacyhalothrin	Control of mosquito by Bednet impregnation
Ninja 5EC	Lambdacyhalothrin 50g/l	Control of Sucking bugs, Helicoverpa

		armigera; aphids gossypii on Cotton and Cashew
Duduthrin 5EC	Lambdacyhalothrin 50g/l	Control of Various insect on cotton
Agrothrin 5EC	Lambdacyhalothrin 50g/L	Control Of America Bollworms, Aphids, Jassids, and Cotton Stainers On Cotton, Insect Pests On Horticultural Crops and control of sucking Bugs (Helopeltis Spp, P.Wayi) on Cashew
Amerat 5EC	Lambdayhalothrin 50g/L	Control of America Bollworms, Aphids, Jassids, Cotton stainers on cotton
Anim Plus 315EC/ULV	Profenofos 15g/L + Lambdacyhalothrin 300g/L	Control of America Bollworms, Aphids, Jassids, and Cotton stainers on cotton
Venom Super 315EC	Profenofos 15g/L + Lambdacyhalothrin 300g/L	Control of Bollworms and aphids on tomatoes
Jackpot 5EC	Lambdacyhalothrin 50g/l	Rotam Control of Various Insect Pests on horticultural crops
Lambdascope 5 EC	Lambdacyhalothrin 50g/l	Control of Insect pests on horticultural crops
Euforia 045ZS	Thiamethoxam 30g/L + Lambdacyhalothrin 15g/L	Control of Various Insect Pests on horticultural crops
Trigger 5EC	Lambdacyhalothrin 50g/l	Control of Various Insect Pests on horticultural crops
Ultracya 5EC	Lambdacyhalothrin 50g/l	Control of Various Insect Pests on horticultural crops
Ridopest 5EC	Lambdacyhalothrin 50g/l	Control of Various Insect Pests on horticultural crops
Triumph 692 EC	Lambdacyhalothrin 60g/l + Acetamiprid 32g/l + Profenofos 600g/l	Control of Helicoverpa armigera and aphid gossypii on cotton
Everprofos 315 EC	Profenofos 300g/L+ Lambdacyhalothrin 15g/L	Control of Aphids, thrips on Roses, French beans
Pulsar 5EC	Lambda cyhalothrin	Control of Various Insect Pests on horticultural crops
Sumo 5%EC	Lambdacyhalothrin 10g/l	Control of Sucking Pests on cashew
Pilarmida 5EC	Lambda – cyhalothrin	Control of Aphids on cabbage
Select Plus 315 EC	Profenofos + lambdacyhalothrin	Control of Aphids on roses and dual Insect pests on cashew
Super lambda 5EC	Lambdacyhalothrin	Control of Various insect on cotton
Supathrin 5 EC	Lambda cyhalothrin 5% EC	Control of Thrips (Thrips tabaci Lindeman) on onions
Konto 5%EC	Lambdacyhalothrin 50g/Lt	Control of major pests in tomato
Surakathrin 5 EC	Lambdacylothrin 50g/l	Control of Fruit Worms on tomatoes

Cs Calates 5%EC	Lambdacyhalothrin 50g/L	Control of Thrips on onions
Attack 10% EW	Lambdacyhalothrin 100 g/l	Control of Thrips on onions
Ninja Plus 5EC	Lambdacyhalothrin 50g/L	Control of Thrips on onions
Snowcon ®100CS	Lambdacyhalothrin 100 g/l	IRS for Control of Mosquitoes
Snowexplode 60EC	Lambdacyhalothrin 30g/L + Acetamaprid 30g/L	Control of Thrips on onions
Lambdapaz 5%EC	Lambdacyhalothrin 50g/	Control of Aphids, Whiteflies And Bollworms on tomatoes
Lambdagold 5%EC	Lambdacyhalothrin 50g/Lt	Control Of America Bollworms, Aphids, Jassids, Cotton Stainers on cotton
Lambdastar 5%EC	Acetamiprid1.5% + Lambdacyhalothrin 3.5%	Control of Thrips on onions
Agrorate 5 EC	Lambdacyhalothrin 50g/L	Control of Fruit Worms on tomatoes
Fortis K 50 EC	Lambda-cyhalothrin 50g/l	Control of cutworms
Prothrin 5%EC	Lambdacyhalothrin 50g/l	Major pests
Engeo 247 ZC	Thiamethoxam 141g/l Lambdacyhalothrin 101g/l)	Green leafhopper, Brown Plant Hopper and Stem Borers
Lambdacure 50EC	Lambdacyhalothrin 50g/l	Control of aphids on cabbages
Laraforce 25EC	Lambdacyhalothrin 25g/L	Control of thrips on onions
Sixonet 5EC	Lambdacyhalothrin 50g/Lt	Against thrips in onions
Extrathrin 22%SC	Thiomexotham 12.6% + Lambdacyhalothrin 9.4%	Against thrips in onions
Devi 5 EC	Lambdacyhalothrin 50g/l	Control of aphids on cabbages
Dudu Kill 10WP	Lambdacyhalothrin 100g/kg	Control of Crawling Insect Pests (Bed bugs)
Snow Extra 315 EC	Profenofos 300g/Lt + Lambdacyhalothrin 15g/Lt	Control of Aphids and thrips in onions
Culexon® 100 WP	Lambdacyhalothrin 100g/l	For Mosquitoes control
Focus 25 EC	Lambdacyhalothrin 25g/L	Aphids (Brevicoryne Brassica) and Tuta Absoluta control in Cabbage and Tomatoes
Maestro 24% WG	Lambda-Cyhalothrin 240g/l	Control of Aphids in cabbages and Sucking Bugs in Cashew
Galaxy 789 EC	Lufenuron 526 g/l + Lambdacyhalothrin 263g/L)	Against tomato fruit borer – Helicoverpa armigera in tomatoes

Charisma 247 SC	Thiamethoxam 14.1% + Lambdahalothrin 10.6%	Control of DBM (Diamond Back Moth) (Plutella Xylostella L.) on cabbages
Icon 10 WP	LambdaCyhalothrin	Control of Mosquitoes
Iconet	Lambda Cyhalothrin	Control of mosquito by Bednet and curtains impregnation for Provisional
Electra 50EC	Lufenuron 500g/L	Control of Various Insect Pests on horticultural crops
Match 050EC	Lufenuron 500g/L	Horticultural crops and Tobacco budworm (Helicoverpa armigera Lepidoptera Noctuidae)
Sixoluf 500EC	Lufenuron 500 g/l)	Control of tomato fruitworm (Heliothis armigera) in tomatoes
Skana Super Dust	Malathion 20g/Kg + Permethrin 0.4g/Kg	Control of Larger Grain Borer and weevil (Sitophilus zeamais) on maize
Severe 50	Malathion 50g/L	Control of Various Insect pests on Horticultural Crops
Tanzamalt 50EC	Malathion 500g/L	Control of various Insect pests on horticultural crops
Magic 50 EC	Malathion 500g/L	Control of various Insect pests on horticultural crops
Mupathion 50EC	Malathion 500g/L	Control of Aphids on Cabbages
Snowthion 50EC	Malathion 500g/L	Control of Aphids on cabbage
Reserve Dust 1.13% DP	Malathion 2% + Permethrin 0.3%	Control of P. Truncatus (Larger Grain Borer), S. Zeamais (Maize Weevil)
Dera Blue Cross 20 Dusts	Malathion 20g/Kg	Against P. Truncatus (Larger Grain Borer), S. Zeamais (Maize Weevil)
Malper Dust 2%	Malathion 16g/Kg + Permethrin 4g/Kg	For controlling Prosthephanus truncatus, maize weevils in maize and beans
Dera Malathion 500E	Malathion 500g/L	Against P. Truncatus (Larger Grain Borer), S. Zeamais (Maize Weevil)
Fyfanon 500g/l	Malathion 500g/L	Control of Chewing and sucking pests on Cotton, tobacco and pasture
Metham Sodium 51SL	Metam sodium 510g/L	Control of Various Insect pests on Horticultural Crops
Mesurool SC200	Methiocarb 200 G/L	Control of thrips in beans
Lannate 25 WP	Methomyl 250g/Kg	Control of Fruit Worm on tomatoes
Milbeknock EC	Milbemectin	Control of Various Insect Pests on Horticultural Crops
Topkazi 80WDG	Pymetrozine 60% + Nitenpyram 20%	Against thrips in onions
Actellic Super Dust	Pirimiphos- Methyl 1.6% + Permethrin 0.3%	Control of larger grain borer (Prosthephanus truncatus) and weevils (Sitophilus zeamais) on maize
Stocal Super Dust	Permethrin +Pirimiphos methyl	Control of P. Truncatus (Larger Grain Borer) and weevils (Sitophilus

		zeamais) on maize storage
Mzinga	Permethrin + Tetramethrin	Control of Mosquito
Olyset Net	Permethrin	Control of Mosquitoes by treated net
Bamiphos Superior D	Pirimiphos + Permethrin	Control of P. Truncatus (Larger Grain Borer) and weevils (Sitophilus zeamais) on maize storage
Guard 50EC	Pirimiphos- Methyl + Permethrin	Control of Various Insect pests on Horticultural Crops
Cereguard 50 EC PLUS	Pirimiphos Methyl + Permethrin	Control of Various Insect pests on Horticultural Crops
Miratex®	Permethrin	Control of Mosquito by treated clothes
Dragnet ft	Permethrin 36.8%	Control of Termites Control on Construction Industry
Bamethrin 380 EC	Permethrin 380 EC	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize
Haigram 90 DP	Pirimiphos-Methyl 6g/Kg + Permethrin 3g/Kg	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Delgrano Grain Dust 2%	Pirimiphosmethyl 16g/Kg + Permethrin 4g/Kg	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize
Olyset®Plus,	Permethrin 2%w/w	Long lasting treated net for Mosquitoes Control
Action Dust	Permethrin 0.3%	For controlling Prostephanus truncatus, maize weevils in cereals
Arrow Aerosol	D, allethrin 0.01+ Permethrin 0.1 Tetramethrin 0.1	Control of Mosquitoes and Cockroaches
Piricab 50EC	Pirimicarb 50g/l	Control of various Insect pests on horticultural crops
Actellic 50EC	Pirimiphos- Methyl 500g/L	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize
Twiga pirimethyl 50EC	Pirimiphos methyl	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize
Temiphos 25 EC	Pirimiphos-Methyl 250g/L	Control of Various Insect pests on Horticultural Crops
Farmactel 50 EC	Pirimiphos Methyl 500g/l	Control of Various Insect pests on Horticultural Crops
Amekel Super 50 EC	Pirimiphos Methyl	Control of Aphids, thrips on Roses, French beans
Risasi Mosquito Mat	Prallethrin 1.5mg/mat	For Mosquitoes control
Selecron 720EC	Profenofos 720g/l	Chewing and Sucking insects pests, mealy bugs

Profecron 720 EC	Profenofos 720g/l	Control of Diamond back moth on cabbage
Profit 720EC	Profenofos 720g/l	Control of fruitworm (Heliothis armigera) on tomato and Mealy bugs Cashew
Amecron 720EC	Profenofos 720g/l	Control of America Bollworms, Aphids, Jassids, and Cotton stainers on cotton
Agrocron 720 EC	Profenofos 720g/l	Control of Various Insect Pests on Horticultural Crops
Agrocron 720 EC	Profenofos 500g/L	Control of fruit worm on tomato and Mealy bugs on cashew
Mocron 720EC	Profenofos 720g/l	Control of Various Insect pests on horticultural Crops and sucking insect pests on cashew
Agrofecron 720EC	Profenofos 720g/L	Control Of Insect Pests On Horticultural Crops and mealy bugs on Cashew
Duducron 720EC	Profenofos 720g/l	Control of Aphids, thrips on Roses, French beans
Mupa Force 720EC	Profenofos 720g/l	Control of Mealy bugs on cashew
Insecron 720EC	Profenofos 720g/l	Control of fruit worms (heliothis armigera) on tomatoes
Supercron 500EC	Profenofos 500g/l	Control of Control of Diamondback moth (DBM), Plutella xylostella on cabbage
Wilcron 720EC	Profenofos 720g/l	Control of fruit worms (heliothis armigera) on tomatoes
Wilcron 720EC	Profenofos 720g/l	Control of fruit worm (Heliothis armigera) on tomatoes
Suracron 720 EC	Profenofos 720g/l	on Aphids on roses
Cscron 720EC	Profenofos 720g/L	Control of Aphids on cabbage
Snowcron 500EC	Profenofos 500g/L	Control of thrips in onions
Bestacron 720EC	Profenofos 720g/l	thrips (thrips tabaci lindeman)
Kulinda 500EC	Profenofos 500g/L	Control of aphids on cabbages
Falcron 500EC	Profenofos 500g/L	Control of aphids on cabbages
Omite 57	Propargite 57%	Control of Various Insect Pests on Horticultural Crops
Dictator Plus	Propargite21.2% + Tetradifon 7.5%	Control of Various Insect pests on Horticultural Crops
Profix® 20 E	Propoxur 200g/l	For Mosquitoes control
Baygon Aerosol	Propoxur	Control of Cockroaches and flies.
Baygon 1% DP	Propoxur	Control of Cockroaches and flies
Edaben 150 SC	Pyridaben	Control of Various Insect pests on Horticultural Crop
Rambor 420SC	Pyridaben 210g/L+Acetamiprid 210g/L)	Against thrips in onions
Radiant 120SC	Spinetoram 120g/L	Control of Diamond Back Moth (Dbm),

		Plutella Cylostella on cabbage
Spintor Dust	Spinosad 1.25g /Kg	Control of P. Truncatus (Larger Grain Borer) and weevils (Sitophilus zeamais) on maize storage
Success Bait (Gf 120)	Spinosad 0.24g/L	Control of Fruit Flies on mangies
Closer 240SC	Sulfoxaflor 240g/L	Control of Aphids on cabbage
Goodnight Aerosol	Tetramethrin 0.17% + D- transallethrin 0.09% + Betacypermethrin 0.06%	For Mosquitoes and cockroaches control
Trig Aerosol	Tetramethrin	Control of Mosquitoes Provisional Registration
Black Jack	Tetramethrin	Control of Mosquitoes
Lanju Aerosol	Tetramethrin 0.17% + D- transallethrin 0.09% + Betacypermethrin 0.06%	For Mosquitoes and cockroaches control
Calypso SC 480	Thiacloprid 480g/L	Control of Various Insects Pests on Horticultural Crops
Methox 25WG	Thiamethoxam 250g/Kg	Control of Aphids on tobacco
Spike 25WG	Thiamethoxam 250g/L	Control of Aphids on cabbage and tobacco
Thiamex 25G	Thiamethoxam 250g/Kg	Aphids and Beetles
Vitara 25WG	Thiamethoxam 250g/l	Aphids
Cruiser Extra 362 FS	Thiamethoxam 350g/lit Fludioxonil 8.34g/lit and Metalaxyl 3.66g/lit	Control seedling diseases and insect pests on cotton.
Celest Top 313 FS	Thiamethoxam + Fludioxonil	Stem, leaf and stripe rust
Solvigo 108 SC	Thiamethoxam + Abamectin	Against Nematodes in Tobacco
Thiamcure 21% SC	Thiamethoxam 210g/l	Against various Insect pest in Horticultural crops
Superthoxam 21%SC	Thiamethoxam 210g/L	Control of aphids on cabbages
Snow Thunder 4EC	Thiamethoxam 30g/l + Emamectin benzoate 10g/l	Control of Aphids and thrips in onions
Talante 350 FS	Thiamethoxam 350 g/l	Control of Aphids, Thrips and soil pest in maize
Snowbecco 25WG	Thiamethoxam 250.g/Kg	Control of Aphids in cabbage
Cruiser 350FS	Thiamethoxam 35 g/L	Control of Seedling pests on Maize, wheat, barley and cotton
Actara 25WG	Thiamethoxam 250g/Kg	Control of Aphids, Whiteflies ,Leaf miner, scales, mealy bugs and antestia, various insect pests on tobacco

Agita 1 GB	Thiamethoxam 10g/ Kg	Control of houseflies
Agita 10WG	Thiamethoxam 100g/ Kg	Control of houseflies
Sotiva 25 WG	Thiamethoxam 200g/l	Control of Various Insect Pests on Beans, Peas , horticultural crops
Deligent 25WDG	Thiamethoxam 250g/L	Control of Aphids on cabbage
Zetabestox 10%EC	Zeta-Cypermethrin	Control of Cotton pests on cotton
NEMATOCIDES		
Furaban 3GR	Carbofuran 3g/kg	Control of Nematodes on Horticultural Crops
NEMACUR 5 GR	Fenamiphos 50g/L	Control of Nematodes on Horticultural Crops
Nemakil 400 EC	Fenamiphos 400g/l	Against Root-knot nematodes in french beans
HERBICIDES		
Pantera 40 EC	Quizalofop-P-tefuryl 4%	Control of various Weeds on Horticultural Crops
WeedsClear 450	Bromoxynil 225g/l + MCPA 225g/l	Control of Post emergence weeds on maize
Bromo 450 MC	Bromoxynil Octanoate 225g/l+ MCPA 225g/l	Control of For the control of weeds in Garlic and horticultural crops on wheat
Bromox 450	Bromoxynil 225g/l + MCPA 225g/l	Control of Weeds on wheat
Badge EC	Bromoxynil Octanoate 327.5g/L + MCPA + 2- ethyl hexyl ester 351g/L	Control of emergency weeds
Triatril MC	Bromoxynil Octanoate + 327.5g/L + MCPA 351g/L	Control of weeds on wheat
Quattro	Bromoxynil 225g/l + MCPA 225g/l	Control of annual weeds on wheat
Tomoxynil,	Bromoxynil 225g/l + MCPA 225g/l	Control of Annual Weeds on Wheat And Barley
Auxo EC337	Isoxadifen-ethyl 25 g/l +Tembotrione 50 g/l +Bromoxynil- octanoate 262 g/l	Control of Broad leaf Weeds (Cyperus L. spec., Eleusine Indica, Digitariaabyssianica Etc) on maize
Huskie 256 EC	Pyrasulfotole, 37g/L + Bromoxynil 210 + Mefenpyr-Diethyl 9 G/L (Safener)	Broadleafed Weeds control (Kochia, Russian thistle, Prickly lettuce, Palmer amaranth, Other pigweed species) in wheat and barley
Buctril MC	Bromoxynil 225g/l + MCPA 225g/l	Control of Control of Broadleaf weeds on Barley, maize, oats, wheat and rice
Lironi 480 EC	Linuron 480g/L	Control of Weed (Nicandra physalodes, Galinsoga parviflora,

		Bidens pilosa etc) on carrot
Multiron 50SC	Linuron 500g/L	Control of Weeds control on horticultural crops
Tordon 101 WS	Picloram 75g/l + 2,4-D Amine 300g/l	Control of broad leaf weeds on bushes and trees
Volacet 900EC	Acetochlor 900g/L	Control of Pre- emergence and annual grasses and certain broadleaf weeds on sugarcane
Harness 900EC	Acetochlor 900g/L	Control of Pre- emergence and annual grasses and certain broadleaf weeds on Horticultural Crops on maize
Agricetol 900EC	Acetochlor 900g/L	Control of Pre- emergence and annual grasses and certain broadleaf weeds on Horticultural Crops.
Jaguar 900EC	Acetochlor 900g/L	Control of Pre- emergency weeds control in sugarcane
Lasset GD	Acetochlor 450 + Terbutylazine + Furtilazole	Control of pre- emergence weeds on maize
Sigma Combi	Atrazine 250g/l + Acetochlor 250 g/l	Control of Broadleaf weeds on maize
Surestart 499SE	Acetochlor 450gai/L + Clopyralid 35gai/L + Flumetsulam 14gai/L	Broadleaf weeds control (Euphorbia heterophylla, Desmodium torluosum, Oxalis latifolia, Argeratum conyzoides, Bidens pilosa, Portulaea oleracea, Conyza bonariensis, Euphobia hirta, Galinsoga paruiflora, (Commelina bengalensis, and Grass WeedsEchinocloa colona, Dactyloctenium aegyptium, Cynodon dactylon, Sorghum versicolor) in maize
Lasso GD Microtech	Alachlor 300g/L + Atrazine 180g/L	Control of Pre- emergence and annual grasses and certain broadleaf weeds on Maize, beans and Vegetables
Lasso Microtech	Alachlor 480g/L	Control of Pre- emergence and annual grasses and certain broadleaf weeds on Maize, beans and Vegetables
Atramet Combi 50SC	Atrazine 235g/L + Ametryn 245g/L	Control of Grasses and broad leaf on weeds on Sugarcane and horticultural Crops
Primagram Gold 660 SC	S-Metolachlor 290g/L + Atrazine 370g/L	Control of Pre- emergence weeds on Maize, Sorghum and Sugarcane
Volmetra 500SC	Atrazine 235g/L + Ametryn 245g/L	Control of Grasses and broad leaf on weeds on Sugarcane
Amezine 480SC	Atrazine 235g/L + Ametryn 245g/L	Control of Weeds on Horticultural Crops
Proazine 50 SC	Atrazine 235g/L + Ametryn 245g/L	Control of Weeds on Horticultural Crops

Balat 650EC	Metolachlor 280g/L + Atrazine 370g/L	Control of Pre- Emergence Weeds on maize
Subagram 660 SC	Atrazine + S - Metolachlor	Control of Weeds on Baby Corns
Elazine 660 SC	Metolachlor 390g/l + Atrazine 270g/l	Control of Various Weeds on horticultural Crops
Maizemax 300 WP	Nicosulfuron 600g/Kg + Atrazine 240g/Kg	Control of Weeds on Horticultural Crops
Prime Gold 660 SC	S-Metolachlor 290g/L + Atrazine 370g/L	Control of Weeds on Horticultural Crops
Albatros 500SC	Ametryn 250g/l + Atrazine 250g/l	Control of pre- emenrgence weeds on sugarcane
Atraweed 50SC	Atrazine 500g/l	Control of Weeds (Saccharum spp.) on sugarcane
Twigazin 500 SL	Atrazine 500g/Lt	Control of Pre- Emergence Weeds on Maize and Sugarcane
Maguguma 660EC	S-metolachlor 290g/l +Atrazine 370 g/l	Control of Various Weeds on maize
Sigma Combi	Atrazine 250g/l + Acetochlor 250g/l	Control of Broad leaf weeds on maize
Lamex 79 WG	Nicosulfuron4 % + Atrazine 75%	Control of Broad leaved weeds such as chenopodium spp, oxygonum sinuatum, datura stramonium, nicandra physalodes, amaranthus spp, argemone Mexicana, trichodesma spp and Grassweeds such as setaria on maize verticillata, eleusine indica.
Atracel 50SC	Atrazine 50%	Control of Setaria verticillata, digitaria spp, cynodon nlemfuensis, dactyloctenium aegyptium, eragrostis tenuifolia, And Broad leaved weeds such as amaranthus spp, chenopodium murale, agerantum conyzoides, bidens pilosa on maize
Mesozin 60EC	Atrazine 48% + Mesotrione 12%	Control of Pre- emergence weed on maize
Matrazine 500SC	Atrazine 500g/l	Control of Weeds (Argemonemexicanacyp erussp, Daturastramonium, Nicandrphysaloides, Oxalis Sp. Setariaverticillata, Amaranthus Sp., Galinsogaparviflora And Chenopodium Spp on maize
Bametrazine 500 SC	Atrazine 250g/l+ Ametryn 250 g/l	Control of Weeds (Amaranthus spp, Bidenspilosa, Commelina spp etc.)on maize
Kiboko Gold 550 SC	Meotrione 5% + Atrazine 50%)	Control of Amaranthus Spp, Chinese Lantern, Love Grass. Etc on maize

Multitrione Super 550 SC	Mesotrione 50g/L + Atrazine 500g/L	Control of Amaranthus Spp, Chinese Lantern, Love Grass. Etc on maize
Prima Extra 660 SL	Metolachlor 290g/L + Atrazine 370g/L	Control of Weeds & broad leaf Argemonemexicanacyper ussp, Daturastramonium, Nicandraphysaloides, e.t.c) on maize
Agrotrazine 500SC	Atrazine 500g/L	Control of Weeds (Argemonemexicanacyper ussp, Daturastramonium, Nicandraphysaloides, Oxalis Sp. Setariaverticillata, Amaranthus Sp., Galinsogaparviflora And Chenopodium Spp on maize
Trazine 500 SC	Atrazine 500 g/L	Control of Weeds such as Argemonemexicanacyper ussp, Datura stamonium on maize
Atra Plus 500 SC	Atrazine 500g/lt	broadleaved and grass weeds in maize
Sixogram 660 SC	Atrazine 370g/L + S- Metalachlor 290g/l	Weeds control Acanthospermum glabratum Acanthospermum hispidum, Amaranthus deflexus , Amaranthus hybridus , Amaranthus spinosus, Amaranthus thunbergii, Bidens bipinnata, Bidens pilosa in maize
SixoFast 550 SL	Atrazine 500g/l + Mesotrione 50g/l	Broadleaf And Grasses Weeds (Amaranthus spinosus ,Amaranthus thunbergii ,Bidens bipinnata,Bidens pilosa) control in maize
Atrazine Cure 50% SC	Atrazine 500g/L	Control of weeds (Amaranthus spinosus , Amaranthus thunbergii, Bidens bipinnata, Bidens pilosa in maize
Pro Gold 660 Sc	Metolachlor 390g/L + Atrazine 270g/L	Control of Datura stramonium, Euphorbia heterophylla, Euphorbia heterophylla, Oxalis latifolia, Argeratum conyzoides, Bidens pilosa, Portulaea oleracea, Conyza bonariensis, Euphorbia hirta, Galinsoga parviflora, Commelina bengalensis, Amaranthus hybridus, Oxalis corniculata, Nicandra physaloides, Sonchus asper and Sonchus arvensis. Grass weed Echinochloa colona, Dactyloctenium aegyptium, Cynodon dactylon in maize
Forcotra 24% SC	Nicosulfuron 4%+ Atrazine 20%	Control of Broadleaf weeds such as Bidens pilosa, Portulaea oleracea,

		<i>Conyza bonariensis</i> , <i>Commelina bengalensis</i> , <i>Amaranthus hybridus</i> , and grass weed species like <i>Echinochloa colona</i> , <i>Dactyloctenium aegyptium</i> , <i>Cynodon dactylon</i> in maize
Green fields 660 SC	Metolachlor 390g/l + Atrazine 270g/l	Weeds control (<i>Acanthospermum glabratum</i> , <i>Acanthospermum hispidum</i> , <i>Amaranthus deflexus</i> , <i>Amaranthus hybridus</i> , <i>Amaranthus</i> , <i>Bidens bipinnata</i> , <i>Bidens pilosain</i>) on maize
Komesha 20 EC	Atrazine 200 g/l	Grass weeds (<i>Amaranthus spinosus</i> , <i>Amaranthus thunbergii</i> , <i>Bidens bipinnata</i> , <i>Bidens pilosa</i>) control in sunflower
Ascozine 90WDG	Atrazine 45% + Simazine 45%	Control of Annual grass and broadleaf weeds <i>Amaranthus spinosus</i> , <i>Amaranthus thunbergii</i> , <i>Bidens bipinnata</i> , <i>Bidens pilosa</i> on maize
Sixontriazina 500 SC	Atrazine 250g/L + Ametyn 250g/L	Control of <i>Amaranthus spinosus</i> , <i>Amaranthus thunbergii</i> <i>Bidens bipinnata</i> , <i>Bidens pilosa</i> on sugarcane
Maraw 250 OD	Mesotrione 235g/L+Atrazine 15g/L	Control of browntop panicum (<i>Panicum fasciculatum</i> L.), Texas millet (<i>Urochloa texana</i> L.), barnyardgrass (<i>Echinochloa crus-galli</i> L.), and sprawling signalgrass (<i>Brachiaria reptans</i> L.). Palmer amaranth [<i>Amaranthus palmeri</i> (S.) Wats in Rice and Wheat
Atranex 80WP	Atrazine 800g/l	Control of Pre- emergence weeds on maize
Atranex 50 SC	Atrazine 500g/L	Control of Various weeds on sugarcane
Snowpanil 70% EC	Butachlor 35% + Propanil 35%	Control of Grasses <i>Echinochloa glabrescens</i> L. and <i>E. colona</i> (L.) Link broad-leaved weeds <i>Ammannia baccifera</i> L. and <i>Euphorbia</i> sp. , and <i>Fimbristylis miliacea</i> (L.) Vahl , <i>Cyperus iria</i> L., <i>C. rotundus</i> L. on rice
Voliuron 800SC	Diuron 800g/L	Control of Weeds on sugarcane
Durano 800 SC	Diuron 800g/L	Control of Various Weeds on horticultural Crops
FarmBase Diuron	Diuron 800g/L	Control of Weeds on Horticultural Crops
Baiuron 800SC	Diuron 800g/L	Control of broad leaf and grass weeds

		in Sugarcane
Diablo 800SC	Diuron 800g/l	Control of Pre- emergency weeds on sugarcane
Diablo 800WG	Diuron 800g/l	Control of Pre- emergency weeds on sugarcane
Haiuron 800SC	Diuron 800g/l	Control of Pre- emergence weeds on maize
Hexarone 600WG	Diuron 468g/l + Hexazinone 132g/l	Control of Pre- emergency weeds on sugarcane
Modiuron 800 SC	Diuron 800g/l	Control of Pre- Emergence weed on maize
Duron Super 650 WG	Diuron 500 G/Kg + Hexazinone 150g/Kg	Control of Barnyardgrass (Watergrass), Crabgrass, Lambsquarters etc on maize
Ndamo 55 WP	Mcpa 100g/Kg + Ametryn 300g/Kg + Diuron 150g/Kg	Control of Various Weeds on Wheat And Barley
Diurex 80SC	Diuron 800g/l	Control of Weeds on sugarcane
Fusilade Forte 150EC	Fluazifopbutyl 150g/L	Control of Various grass weeds and as an Artificial ripener on Beans, Tobacco, Sugarcane
Major Super 42.5 EC	Fomasafen + Fluazifop-P- Butyl	Control of Various Weeds on horticultural Crops
Kusoya 150 EC	Fluazifop-P-Butyl 150g/l	Control of Broadleaf Weeds on beans
Amazone 250EC	Fluazifop-p-butyl 12,5% + Fomesafen 12.5%	Control of Setaria viridis, Eleusine indica, Digitaria ciliaris Echinochloa, spp. in beans
Fusilade Super12.5% EC	Fluazifopbutyl 125g/l	Control of Annual and perenial weeds on various crops
Basta 20SL	Glufosinate Ammonium 200g/l	Control of General weeds on Plantation crops orchards, vineyards
Roundup 360 SC	Glyphosate 360g/l	Control of Weeds (Non Selective) on Coffee, Citrus, and Bananas
Mamba 360 SL	Glyphosate 360g/L	Control of Annual and perennial grasses and broad leaved weeds on wheat
Rondopaz 360SL	Glyphosate 360g/L	Control of Annual and perennial grasses and broad leaved weeds on wheat.
Kalachi 480 SL	Glyphosate 480g/L	Control of Annual and perennial weeds on various crops
Volsate 360SL	Glyphosate 360g/L	Control of Weeds (Non Selective) on sugarcane
Touchdown Forte	Glyphosate 500g/L	Control of Weeds (Non Selective) on Coffee, Tea, Cereals, Cashew
Weed All 480SL	Glyphosate 480g/L	Control of Weeds (Non Selective) on

		banana
Rondo 48SL	Glyphosate 480g/L	Control of Annual and perennial weeds including sedges, grasses and woody plants on various crops
Roundup 450 Turbo	Glyphosate 450g/L	Control of Control of Post emergence weeds on coffee
Weedmaster	Glyphosate 500g/L	Control of Weeds (Non Selective) on banana
Glycel 41SL	Glyphosate 410 g/L	Control of Various Weeds on tomatoes
Gugusate 48%SL	Glyphosate 480g/L	Control of non selective Weeds on coffee
Baphosate 360SL	Glyphosate 360g/L	Control of Post – emergence on various crops
Elglysate 480SL	Glyphosate 480g/L	Control of Weeds (Non Selective) on various crops
Glyphon 360SL	Glyphosate 360g/L	Control of Weeds control on banana
Otil 360SL	Glyphosate 360g/L	Control of Weeds (Non Selective) on banana
Ronsate 360SL	Glyphosate 360g/L	Control of Weeds (Non Selective) on horticultural Crops
Triphosate 360SL	Glyphosate 360g/L	Control of Weeds (Non Selective) on horticultural Crops
Amerond 480SL	Glyphosate 480g/L	Control of Weeds (Non Selective) on various crops
Megasate 480SL	Glyphosate 360g/L	Control of Weeds (Non Selective) on horticultural Crops
Agrosate 480 SL	Glyphosate 480g/L	Control of Weeds (Non Selective) on horticultural Crops
Jembe Supa 480SL	Glyphosate 480g/L	Control of Weeds (Non Selective) on Horticultural Crops
Sapikill 480SL	Glyphosate 480g/L	Control of Weeds (Non Selective) on horticultural Crops
Weedex 480SL	Glyphosate 480g/L	Control of various non selectove Weeds on horticultural Crops
Mocphosate 480 SL	Glyphosate 480g/L	Weeds (Non Selective)
Willosate 360SL	Glyphosate 360g/L	Control of Weeds on Horticultural Crops
Touch all 48SL	Glyphosate 480g/L	Control of Weeds (Non Selective) on horticultural Crops
Allround 480SL	Glyphosate 480g/L	Control of Weeds (Non Selective) on various crops
Gly 48SL	Glyphosate 480g/L	Control of Various Weeds on coffee
Glypro 41 SL	Glyphosate 410 g/L	Control of weeds on coffee

Mamba High-Load	Glyphosate 480g/L	Control of Weeds under minimum tillage on Maize
MultiGlyphosate 48SL	Glyphosate 480g/L	Control of Weeds under Minimum tillage on maize
Piranha 360SL	Glyphosate 480g/L	Control of Non-selective weeds on sugarcane
Piranha 360WG	Glyphosate 360g/Kg	Control of Non-selective weeds on sugarcane
Gallant Super 108EC	Haloxypop-R Methyl Ester 108g/l	Annual and Perennial grasses in common beans (<i>phaseolus vulgaris</i>)
Tanfop 108EC	Haloxypop-r-methyl ester 108g/l	Annual and Perennial grasses in common beans (<i>phaseolus vulgaris</i>)
Actril DS	loxynil + 2,4 – D	Control of Broad leaved weeds on cereals
Adengo SC 465	Isoxaflutole 220g/L + Thiencazone Methyl 190g/l (Tcm) + Safener Cyprosulfamide 50g/L	Control of Grasses, Sedges And Broadleaf Weeds on maize
Multiron 50SC	Linuron 500g/L	Control of Weeds on horticultural crops
Famuron 50WP	Linuron 500g/kg	Control of Various Weeds on onions and carrots
Lironi 480 EC	Linuron 480g/L	Control of Weed (<i>Nicandra physalodes</i> , <i>Galinsoga parviflora</i> , <i>Bidens pilosa</i> etc) on carrot
Agro 72 WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of late blight disease (<i>Phytophthora infestans</i>) on tomatoes
Volbuzine 480EC	Metribuzin 480g/L	Control of Pre- emergence weed on sugarcane
Sencal 480SC	Metribuzin 480g/L	Control of Various Weeds on sugarcane
Zenka 480SC	Metribuzin 480g/L	Control of various Weeds on horticultural crops
Mistral 480ec	Metribuzin 480g/L	Control of various Weeds on Horticultural Crops
Bencor 480SC	Metribuzin 480g/L	Control of Various Weeds on maize
Hencor 480EC	Metribuzine 480g/l	Control of Pre- emergence weeds on maize
Mobuzine 480SC	Metribuzine 480g/l	Control of various Weeds on sugarcane
Moto 750WP	Metribuzine 700Kg	Control of Early post emergence and pre- emergence weeds on maize
Torpedo 480SC	Metribuzine 480g/l	Control of Pre- emergency weeds on sugarcane
Tancor 480SL	Metribuzin 480 SL	Control of Pre- emergence weed on

		sugarcane
Sevensmetri 70 WG	Metribuzin 700g/kg	Control of Pre- emergence weed on maize
Matribu 480 SC	Metribuzin 480 g/L	Control of Weeds (Nicandra physalodes, Galinsoga parviflora, Bidens pilosa etc on maize
Sencor Plus 517 SC	Induziflam 37.5 + Metribuzin 480g/L	Annual weeds (grasses & dicots) on sugarcane
Sencor 480SC	Metribuzin 480g/l	Control of Pre- emergence weed on sugarcane
Oxazon 250	Oxadiazon250g/l	Control of Various Weeds on Lowland Rice
Tanstar 250 EC	Oxadiazon 250 g/lt	Control of Various Weeds on Lowland Rice
Wilofen 250 EC	Oxadiazon 250 g/lt	Control of Various Weeds on Lowland Rice
Galigan 240EC	Oxyfluorfen 240g/L	Control of Various Weeds on sugarcane
Komesha 240EC	Oxyfluorfen 240g/L	Control of Pre- emergence weeds on onions
Sufen 240 EW	Oxyfluorfen 240g/l	Control of Pre- emergence weeds on onions
Boxyfan 240EC	Oxyfluorfen 240g/l	Control of Pre- emergence weeds on onions
Clobber 240 EC	Oxyfluorfen 240 g/l	Control of Pre- emergence weeds on onions
Tanflu 240 EC	Oxyfluorfen 240 g/l	Control of Pre- emergence weeds on onions
Narogug 50EC	Oxyfluorfen50% w/v	Control of Weeds (Amaranthus Sp., Sonchusoleraceus, Ageratum Conyzoides) on onions
Oxygold 240EC	Oxyfluorfen 240g/l	Control of Weeds (Amaranthus Sp., Sonchusoleraceus, Ageratum Conyzoides) on onions
Snowflen 240 EC	Oxyfluorfen 240 g/l	Pre -emergence weed control
Bold 240EC	Oxyfluorfen 240g/L	Pre-Emergence Weeds contol (Bidens pilosa, Portulaea oleracea Galinsoga paruiiflora, Commelina bengalensis, Roripa micrantha, Oxygenum sinuantum, Sida ovate, Vigna parheri) in onions
Volmethalin 500EC	Pendimethaline 500g/L	Control of Weeds on sugarcane
Pencal 500EC	Pendimethaline 500g/L	Control of Various Weeds on sugarcane
Panida 500EC	Pendimethaline 500g/L	Control of Various Weeds on maize

Calpen 500SC	Pendimethaline 500g/L	Control of various Weeds on Horticultural Crops
Alligator 500EC	Pendimethaline 500g/L	Control of Pre- emergency weeds on sugarcane
Fist 50 EC	Pendimethaline 500g/L	Control of Various Weeds on onions
Kayanga 500 EC	Pendimethaline 500g/L	Control of Various Weeds on onions
Deva Pendi 500 EC	Pendimethaline 500g/L	Control of Weeds (Saccharum spp.) on sugarcane
Pendimet 500EC	Pendimethaline 500g/L	Control of Pre- Emergence weed on maize
Weedstop 500 EC	Pendimethaline 500g/L	Control of Pre- Emergence weed on maize
Trek P EC	Terbutylazine 270 + Pendimethalin 64 EC	Control of Pre emergence weeds such as phyllanthus fraternus, commelina benghalensis, etc and Grass weeds such as echinochloa colona, cynodon dactylon, in irrigated lowland rice
Wilstop 500EC	Pendimethalin 500g/L	Control of Weeds such as (Daturastramonium,Galinogaparviflora, Bidenspilosa, Amaranthusspp,) on maize
Gugupan 50EC on maize	Pendimethalin 500g/L	Control of pre emergence weeds such as agerantum conyzoides, commelina benghalensis, datura stramonium, galinsoga parviflora, argemone Mexicana, amaranthus spp
Accotab 330EC	Pendimethaline 330g/L	Control of Suckers on tobacco
Pendalin 500 EC	Pendimethalin 500g/l	Grass and broad leaf weeds control (Nicandra physalodes, Amaranthus spp, Ageratum conyzoides, Bidens pilosa, Galinsoga parviflora, , etc; and Grasses such as etaria verticillata, Eleusine indica in maize
Stoper 450 CS	Pendimethalin 450g/l	Against Grass and broad leaf weeds Broadleaf weedsNicandra physalodes, Amaranthus spp, Ageratum conyzoides, Bidens pilosa, Galinsoga parviflora, , etc Grasses such as etaria verticillata, Eleusine indica maize
Stomp 455 CS	Pendimethalin 455g/l	Against Broadleaf weeds Nicandra physalodes, Amaranthus spp, Ageratum conyzoides, Bidens pilosa, Galinsoga parviflora, Launaea cornuta,

		Tagetes minuta, Euphorbia hirta, etc , Grasses such as etaria verticillata, Eleusine indica and Eragrostis sp in Wheat barley and rice; Post emergence weeds in sugarcane
Alligator Extra 455 CS	Pendimethaline 500g/l	Against Broadleaf weeds Nicandra physalodes, Amaranthus spp, Ageratum conyzoides, Bidens pilosa, Galinsoga parviflora, Launaea cornuta, Tagetes minuta, Euphorbia hirta, etc Grasses such as etaria verticillata, Eleusine indica and Eragrostis sp in sugarcane
Stomp 500 EC	Pendimethalin 500g/L	Control of Grasses and broad leaved on Sugarcane, cereals, cotton, sisal, rice
Tordon 101 WS	Picloram 75 g/L + 2,4- D Amine 300g/L	Control of Broad leaved weeds on bushes and trees
Pantera 40 EC	Quizalofop-P-tefuryl 4%	Control of various Weeds on Horticultural Crops
Amigo 650WG	Ametryn 400 + Terbutryn 250 g/Kg	Control of Weed (Datura stamonium, nutsedge, Tegetes minuta, Malva spp and commelina benghalensis) on Wheat And Barley
FUNGICIDES		
Benomilo 50WP	Benomyl 50g/kg	Control of Powdery mildew and fungal diseases on horticultural crops
Benofarm 50 WP	Benomyl 50g/kg	Control of Powdery mildew and fungal diseases on horticultural crops
Pearl 500 SC	Carbendazim 500 g/l	Control of Fungal diseases on Horticultural Crops
Elcazim 50SC	Carbendazim 500 g/l	Control of Fungal diseases on Horticultural Crops
Tanzim 50SC	Carbendazim 500 g/l	Control of Fungal diseases on Horticultural Crops
Noxtar 40EC	Flusilazole	Control of Fungal diseases on Horticultural Crops
Rovral 500Flo	Iprodione 500g/L	Control of various Fungal diseases on Horticultural Crops
Proazole 25 EC	Propiconazole 250g/L	Control of Various fungal diseases on horticultural Crops
Molgard 25EC	Propiconazole 250g/L	Control of Various fungal diseases on horticultural Crops
Agromenol 250	Triadimenol 250g/L	Control of various Fungal diseases on horticultural crops and Powdery Mildew (Oidium Anacardii Noack) on

		Cashew
Transmute 250 EC	Triadimenol 250g/L	Control of various Fungal diseases on horticultural crops and Powdery Mildew (Oidium Anacardii Noack) on Cashew
Patriotic 250EC	Triadimenol 250g/L	Control of various Fungal diseases on horticultural crops and Powdery Mildew (Oidium Anacardii Noack) on Cashew
Procure 480 SC	Triflumizole 480g/L	Control of Various fungal diseases on horticultural Crops
Terror 50 EC	Thiophanate Methyl	Control of Fungal diseases on Horticultural Crops
Defender 240EC	Triadimenol 240g/L	Control of Powdery mildew on roses
Soprano C	Epoxyconazole + Carbendazim	Control of Foliar diseases on Wheat And Barley
Seed Plus 20WS	Imidacloprid 100g/Kg + Metalaxyl 5g/Kg + Carbendazim 5g/kg	Control of Early insect pests and soil borne diseases and fungal diseases on horticultural crops Maize, beans
Swing 250SC	Epoxiconazole 125g/L + Carbendazim 125g/L	Control of Fungal diseases on Wheat and Barley
Bavistin 50DF	Carbendazim 50%	Control of Fungal diseases on Horticultural Crops
Funco 500WP	Carbendazim 500 g/Kg	Control of Fungal diseases on Horticultural Crops
Pearl 500 SC	Carbendazim 500 g/l	Control of Fungal diseases on Horticultural Crops
Elcazim 50SC	Carbendazim 500g/L	Control of Fungal diseases on Horticultural Crops
Tanzim 50SC	Carbendazim 500 g/l	Control of Fungal diseases on Horticultural Crops
Tandem 250SC	Carbendazim 125g/L + Tebuconazole 125g/L	Control of Fungal diseases on Horticultural Crops
Seed Plus 30 WS	Imidacloprid 10% + Metalaxyl 10% + Carbendazim 10% +	Control of Early insect pests and fungal diseases on horticultural Crops
Innovex 360SC	Triadimefon 35g/kg + Carbendazim 325g/l	Control of Late blight diseases on tomatoes
Switanza 25.4 SC	Epoxyconazole 120 + Carbendazim 120	Control of Foliar diseases on Wheat And Barley
Wilthane 800WP	Carbendazim 800g/Kg	Control of Powdery mildew on roses
Bendera 50 WP	Carbendazim 500g/Kg	Control of Powdery mildew on roses
Barbendazim 80WP	Carbendazim 800g/Kg	Control of late blight disease on tomatoes
Pro-Carben 59.7 %	Prochloraz 462g/Kg +	Control of Foliar Diseases on wheat

WP	Carbendazim 135g/Kg	
Multi-Triacarb 500 SC	Triadimonol 250 g/l + Carbendazim 250 g/l	Control of Powdery Mildew on tomatoes
Stardom 500SC	Carbendazim 500g/l	Control of late blight disease on tomatoes
Bendazim 500SC	Carbendazim 500g/l	Control of Late blight diseases of Tomatoes
Forsol 500WP	Carbendazim 50%	Control of Late blight diseases of Tomatoes
Seed Watch 20 WS	Imidachlopid 10% + metalaxyl 5% + carbendazim 5% WS	Control of Seedling pests and fungal diseases (Seedling pests and fungal diseases (Maize leafhoppers , maize thrips) on maize
Banko Plus	Carbendazim 100g/l Chlorothalonil 550g/l	Control of late blight disease (Phytophthora infestans) on tomatoes
Daconil 720 SC	Chlorothalonil 720g/L	Control of Coffee Berry Diseases on coffee
Linkonil 500SC	chlorothalonil 500g/Lt	Control of late blight disease (Phytophthora infestans) on tomatoes
Pilarich 500SC	Chlorothalonil 500g/L	Control of Fungal diseases on Horticultural Crops
Odeon 82.5 WDG	Chlorothalonil 82.5g/Kg	Control of Late blight diseases on tomatoes
Banko 720 SC	Chlorothalonil 720g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Verol 720SC	Chlorothalonil 720g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Echlonil 720SC	Chlorothalonil 720g/L	Control of Foliar diseases on wheat
Odeon 720SC	Chlorothalonil 720g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Rav 500SC	Chlorothalonil 500g/L	Late blight diseases (phytophthora infestans) on tomatoes and leaf, Nut blight disease and Powdery mildew on cashew
Odeon 500SC	Chlorothalonil 500g/L	Control of Various Fungal Diseases on Horticultural Crops
Glider 720 SC	Chlorothalonil 720g/L	Control of Fungal diseases on Horticultural Crops
Rav Super 720 SC	Chlorothalonil 720g/L	Control of fungal diseases on horticultural crops
Asconil 720SC	Chlorothalonil 720g/L	Control of Various Fungal Diseases on Horticultural Crops
Merlonil 720SC	Chlorothalonil 720g/L	Control of Fungal diseases on Horticultural Crops
Truenil 720 SC	Chlorothalonil 720g/L	Control of Fungal diseases on Horticultural Crops
Fangonil 50 SC	Chlorothalonil 500g/L	Control of Fungal diseases on

		Horticultural Crops
Mo-Bankoner 720SC	Chlorothalonil 720g/L	Control of Fungal diseases on Horticultural Crops
Solytrin 72%SC	Chlorothalonil 720g/l	Control of Coffee Berry disease on coffee
Freed ®720SC	Chlorothalonil 720g/l	Control of Fungal diseases on Horticultural Crops
Twigathalonil 500SC	Chlorothalonil 720g/l	Control of Late Blight Diseases on tomatoes
Rovena 720 EC	Chlorothalonil 720g/L	Control of early Blight Diseases on tomatoes
Bachloronil 720SC	Chlorothalonil 720g/L	Control of Late Blight Diseases on potatoes
Greenil 720 SC	Chlorothalonil 720g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Linkonil 720 SC	Chlorothalonil 720g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Ronil 720 SC	Chlorothalonil 720g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Bestonil 500SC	Chlorothalonil 500g/l	Control of Late Blight Diseases on tomatoes
Chloroplus 720SC	Chlorothalonil 720g/L	Control of Late Blight Diseases on tomatoes
Bancofee 720SC	Chlorothalonil 720g/L	Control of Late Blight Diseases on tomatoes
Damka 720SC	Chlorothalonil 720g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Supanil 90 WDG	Chlorothalonil 900g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Agrodank 720 SC	Chlorothalonil 720 g/l	Control of late blight disease (Phytophthora infestans) on tomatoes
Superwill 720 SL	Chlorothalonil 640% + Dimethomorph 80%)	Control of Late Blight Diseases on tomatoes
Eminent Star 312.5 SC	Tetraconazole 62.5g/Kg + Chlorothalonil 250g/L	Control of Late blight diseases of Tomatoes
Falconil Super 72%SC	Chlorothalonil 720g/L	Control of late blight diseases and rusts on Tomatoes and Beans
Rova 500	Chlorothalonil 500g/l	Control of Coffee Berry disease on coffee
Clortocaffaro 54 FLW	Chlorothalonil	Control of Coffee Berry disease on coffee
Banko Plus	Carbendazim 100g/l Chlorothalonil 550g/l	Control of late blight disease (Phytophthora infestans) on tomatoes
Helmony 500	Chlorothalonil 500g/l	Control of late blight disease (Phytophthora infestans) on tomatoes
Poncho FS600	Clothianidin 600g/L	Control of Maize Lethal Necrosis

		Disease (MLND) on maize
Kocide 101	Copper Hydroxide	Control of Coffee Berry Diseases and various fungal diseases on Coffee, Tomatoes, Beans, peanuts
Blue shield	Copper Hydroxide	Control of Coffee Berry disease on coffee
Kocide DF	Copper Hydroxide	Control of Coffee Berry Diseases on coffee
Opera 183SE	Pyraclostrobin 133 g/l + Epoxiconazole 50 g/l	Control of Grey Leaf Spot (Cercosporazeae- maydis) on maize
Swing Xtra 497SC	Thiophanate-methyl 310 g/L + Epoxiconazole 187 g/L	Control of Leaf Diseases on rice
Noxtar 40EC	Flusilazole 40g/l	Control of Fungal diseases on Horticultural Crops
Folpan 50SC	Folpet 500g/L	Control of Fungal diseases on Horticultural Crops
Folpan 50WP	Folpet 500g/L	Control of Late blights, fungal diseases on horticultural crops on Horticultural Crops , Tomatoes
Fungaflor 100EC	Imazalil 100g/L	Control of Powderly mildew on roses
Monceren GT FS 390	Imidacloprid 233g/L + Pencycuron 50g/L + Thiram 107g/L	Control of Fungal diseases on Horticultural Crops
Seedcare	Imidacloprid 10% + Metalaxyl 10% + Thiram 10%	on Maize Seeds Treatment
Amigo FS275	Imidacloprid 175g/L + Thiram 100g/L	Control of Maize Lethal Necrosis Disease (MLND) on maize
Seed Care Gold 350 WS	Imidacloprid 250g/Kg + Thiram 100g/Kg	Maize Seeds Treatment
Monceren GT FS 390	Imidacloprid 233g/L + Pencycuron 50g/L + Thiram 107g/L	Control of Fungal diseases on Horticultural Crops
Seedcare	Imidacloprid 10% + Metalaxyl 10% + Thiram 10%	on Maize Seeds Treatment
Amigo FS275	Imidacloprid 175g/L + Thiram 100g/L	Control of Maize Lethal Necrosis Disease (MLND) on maize
Seed Care Gold 350 WS	Imidacloprid 250g/Kg + Thiram 100g/Kg	Maize Seeds Treatment
Rovral 250Flo	Iprodione 250g/L	Control of various Fungal diseases on Horticultural Crops
Rovral 500Flo	Iprodione 500g/L	Control of various Fungal diseases on Horticultural Crops
Eprodane 500 SC	Iprodione	Control of various Fungal diseases on Horticultural Crops
Ardent	Kresoxim Methyl 500g/L	Control of Powderly mildew on roses
Collis 30 SC	Boscalid 200g/L + Kresoxim-methyl 100g/L	Control of Various Fungal diseases on Horticultural Crops

Ergon 50 SC	Kresoxim Methyl 500g/l	Control of Powdery Mildew on tomatoes
Batro 50 WDG	Kresoxim-Methyl 500g/Kg	Control of Powdery Mildew on tobacco
Dithane M-45	Mancozeb 800g/Kg	Control of Anthracnose scab, late blight, rust, mildews on Vegetables, beans, fruits
Ridomil Gold 68WG	Metalaxyl-M 40g/Kg + Mancozeb 640g/Kg	Control of Late blight diseases on Potatoes
Sancozeb 800 WP	Mancozeb 800g/Kg	Control of Late blight diseases on tomatoes
Milthane Super	Mancozeb 800g/Kg	Control of Late blight diseases on tomatoes
Helcozeb 80WP	Mancozeb 800g/Kg	Control of Late blight diseases on tomatoes
Ivory 80WP	Mancozeb 800g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Ivory M72	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Early blight diseases on potatoes
Farmerzeb 800WP	Mancozeb 800g/kg	Control of early blight and downy mildew in Potatoes and tomatoes
Pilarzeb 80WP	Mancozeb 800g/Kg	Control of Late blight diseases on tomatoes
Mupazeb M-45	Mancozeb 800g/Kg	Control of Late blight diseases on tomatoes
Victory 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Late blight diseases on tomatoes
Fungozeb 80WP	Mancozeb 800g/Kg	Control of Late blight diseases on tomatoes
Linkmil 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control Of Late Blight Diseases On Tomatoes and powdery mildew on Cashew
Ugonall 580WP	Mancozeb 48g/Kg + Metalaxy 10g/Kg	Control of Late blight diseases on tomatoes
Sunstar 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Late blight diseases on tomatoes
Superkinga	Fosetyl aluminium + Mancozeb	Control of Late blight diseases (phytophthora infestants) on tomatoes
Amezeb 80WP	Mancozeb 800g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Ebony 80WP	Mancozeb 800g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Ebony M72	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes.
Mistress M72	Cymoxanil 8% + Mancozeb 64%	Control of Late blight diseases on

		tomatoes
Oshothane 80WP	Mancozeb 800g/Kg	Control of Late blight diseases on tomatoes
Master 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Late blight diseases on tomatoes
Uthane 80WP	Mancozeb 800g/Kg	Control of Late Blight Diseases on tomatoes
Winner 80WP	Mancozeb 800g/Kg	Control of Late blight diseases on tomatoes
Acrobat Mz	Dimethomorph 90g/Kg + Mancozeb 600g/Kg	Control of Various Fungal Diseases on Horticultural Crops
Milor 72 WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of various Fungal diseases on Horticultural Crops
Globe 76WP	Mancozeb 700g/kg + Cymoxanil 60g/kg	Control of Fungal diseases on Horticultural Crops
Volar MZ 690WP	Dimethomorph 90g/Kg + Mancozeb 600g/Kg	Control of Fungal diseases on Horticultural Crops
Ascozeb 80WP	Mancozeb 800g/Kg	Control of various Fungal diseases on Horticultural Crops
Farmerzone 80WP	Mancozeb 800g/Kg	Control of Fungal diseases on Horticultural Crops
Unizeb 80WP	Mancozeb 800g/Kg	Control of Fungal diseases on Horticultural Crops
Agrozeb 80WP	Mancozeb 800g/Kg	Control of Fungal diseases on Horticultural Crops
Mancoflo 80WP	Mancozeb 800g/Kg	Control of Fungal diseases on Horticultural Crops
Unilax 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of fungal diseases on horticultural crops
Mancolax 72%WP	Mancozeb 640g/Kg+ Metalaxyl 80g/Kg	Control of Fungal diseases on Horticultural Crops
Tocozeb Super 72 WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Fungal diseases on Horticultural Crops
Mo-Mancozeb 80WP	Mancozeb 800g/Kg	Control of Fungal diseases on Horticultural Crops
Ridofarm 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Fungal diseases on Horticultural Crops
Eureka 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of various Fungal diseases on Horticultural Crops
Bagonall Super 580 WP	Mancozeb 48g/Kg + Metalaxy 10g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes and control of powdery mildew (oidium anacardii) on cashew
Suthane 80WP	Mancozeb 800g/kg	Control of Late blight (Phytophthora Infestants) on tomatoes
AgriLax 720 WP	Mancozeb 640g/Kg+ Metalaxyl	Control of Various fungal diseases on

	80g/Kg	horticultural Crops
Garden Gold 700WP	Mancozeb 645g/Kg +Iprovalicab 55g/kg	Control of Fungal diseases on Horticultural Crops
Movor 68 WP	Mancozeb 640g/Kg + Metalaxyl 40g/Kg	Control of Fungal diseases on Horticultural Crops
Metazeb 72WP	Mancozeb 640 g/kg Metalaxy 80g/kg	Control of Fungal diseases in horticultural
Bagonil 80 WP	Mancozeb 80%	Control of late blight disease (Phytophthora infestans) on tomatoes
Emalaxyl Plus 72WP	Mancozeb 64% + Cymoxanil 8 WP	Control of Late blight (Phytophthora Infestants) on tomatoes
Devameta 720WP	Mancozeb 64% + Metalaxyl 8%	Control of Fungal infection in Tomatoes (Lycopersicon esculentum Miller) on tomatoes
Greenzeb 80%WP	Mancozeb 800g/Kg	Control of Late Blight Diseases on tomatoes
Combat 72 WP	Mancozeb 640g/kg + Metalaxyl 80g/kg	Control of Late Blight Diseases on tomatoes
Masterkinga 72 WP	Mancozeb 640g/Kg + cymoxanil 80g/Kg	Control of Late Blight Diseases on tomatoes
Supalaxyl 72 WP	Mancozeb 640g/kg + Metalaxyl 80g/kg)	Control of Late Blight Diseases on tomatoes
Supazeb 80 WP	Mancozeb 800g/Kg	Control of Late Blight Diseases on tomatoes
Vegezeb 70WP	Mancozeb 280g/kg + Sulphur 420g/Kg	Control of Early blight diseases on tomatoes
Anizeb 80%WP	Mancozeb 80WP	Control of Late blight diseases on Potatoes
Mister 72 WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Runner 72 WP	Mancozeb 640g/kg + Metalaxyl 80g/kg	Control Of Late Blight on Tomato (Phytophthora Infestans) and powdery mildews on Cashew
Wilzeb 800WP	Mancozeb 800g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Ugonal 580 SL	Mancozeb 48g/Kg + Metalaxy 10g/Kg	Control of Powdery Mildew on cashew
Mancozide 80 WP	Mancozeb 800g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Formanco 800WP	Mancozeb 800g/Kg	Control of Late Blight Diseases on tomatoes
Ithane 800WP	Mancozeb 800g/Kg	Control of Late Blight Diseases on tomatoes
Supervory 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Late Blight Diseases on tomatoes

Agrozeb Gold 700WG	Mancozeb 600g/Kg + Dimethomorph 100g/Kg	Control of Late Blight Diseases on tomatoes
Snow Success 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Agro Mancozeb 800WP	Mancozeb 800g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Metalman 72WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Mancostar Super 720WP	Mancozeb 640g/kg + Metalaxyl 80g/Kg	Control of late blight disease (Phytophthora infestans) on tomatoes
Cuprofix 42 WDG	Copper Sulphate 120 g/l + Mancozeb 300g/L	Control of late blight disease (Phytophthora infestans) on tomatoes
Multi Powder Plus 78WP	Mancozeb 60 g/l + Cymoxanil 8g/l+ Dimethomorph 10g/l	Against Blights on tomatoes
Rhino Gold 72WDG	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Late blight
Cropzeb 72%WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Late Blight Diseases
Twigamox 72 WP	Mancozeb 64g/Kg + Cymoxanil 8g/Kg)	Control of Late blight diseases of Potatoes
Sixozeb 720 WP	Metalaxyl 80g/Kg + Mancozeb 640g/Kg	Control of Late blight diseases of Tomatoes
Sixozeb 720 WP	Metalaxyl 80g/Kg + Mancozeb 640g/Kg	Control of Late blight diseases of Tomatoes
Snowthane M-45	Mancozeb 800g/Kg	Control of Late blight diseases of Tomatoes
Rip 760 WP	Cymoxanil 60g/Kg + Mancozeb 700 g/Kg	Control Of Late Blight diseases in Potatoes
Rio Gold 72%WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Late blight diseases of Tomatoes
Falcozeb 80 WP	Mancozeb 800g/Kg	Control of Late blight diseases of Tomatoes
Fungocil 72 WP	Mancozeb 640g/kg + Metalaxyl 80g/Kg	Control of Late blight disease of tomato (Phytophthorainfestans) in Tomatoes
Zetanil 76 WP	Cymoxanil 60g/Kg + Mancozeb 700 g/Kg	Control of Late blight diseases of Potatoes
Fungoforce 72% WP	Mancozeb 640g/Kg + Metalaxyl 80 g/kg	Late blight disease (Phytophthorainfestants) on Tomatoes
Z -force 80% WP	Mancozeb 80 % g/kg	Late blight disease (Phytophthorainfestants) on Tomatoes

Snow Power 45% WP	Cymoxanil 4% + Mancozeb 12% + Copper Oxchloride 29%	Control of Late blight diseases of potatoes
Cyzeb 72 WG	Mancozeb 640g/Kg and Cymozanil 80g/Kg	Control of early and late blight diseases of potatoes
Matric 720 WP	Mancozeb 64g/Kg + Cymoxanil 8g/Kg	Control of Late Blight Diseases in Potatoes
Telepower 72 MZ	Mancozeb 640g/Kg + Metalaxyl 80G/KG	Control of Late blight diseases of Tomatoes
GALBEN M8-65	Benalaxyl 80g/Kg + Mancozeb 650g/Kg	Control of late blight disease (Phytophthora)
Rido Super 72 WP	Mancozeb 640g/Kg + Metalaxyl 80g/Kg	Control of Late blight diseases on Potatoes
Magna 500 SC	Procymidone 500 SC	Control of Botrytis on roses
Domark 40	Tetraconazole 40g/L	Control of Fungal diseases on various crops
Apron Star 42 WS	Thiamethoxam 20g/Kg + Metalaxyl – M 20g/Kg + Difenoconazole 2g/Kg	Control of Soil pest borne and diseases on Maize, beans, sesame and sorghum.
Topsin-M 70% WP	Thiophanate- Methyl 70% w/w	Control of Blast leaf spot, powdery mildew, scabs, blight on Rice, wheat, tobacco, horticultural crops
Terror 50 EC	Thiophanate methyl 500g/l	Control of Fungal diseases on Horticultural Crops
Megasin 70%WP	Thiophanate Methyl 700g/Kg	Control of Fungal diseases on Horticultural Crops
Bellet 400 WP	Thiram 300g + Thiophanate-Methyl 100% g/Kg	Control of Seedling pests and fungal diseases (Seedling pests and fungal diseases (Maize leafhoppers , maize thrips) on maize
Bayfidan 250 ec	Triadimenol 250g/L	Control of leaf rust on coffee and powdery mildews, fungal diseases on cashew
Defender 240EC	Triadimenol 240g/L	Control of Powdery mildew on roses
Mupafidan 250EC	Triadimenol 250g/L	Control of Control of Powdery Mildew (Oidium acacardii Noack) on Cashew
Agromenol 250 EC	Triadimenol 250g/L	Control of various Fungal diseases on horticultural crops and Powdery Mildew (Oidium Anacardii Noack) on Cashew
Transmute 250 EC	Triadimenol 250g/L	Control of Fungal diseases on horticultural crops and Powdery Mildew (Oidium Anacardii Noack) on Cashew
Patriotic 250EC	Triadimenol 250g/L	Control of Fungal diseases on Horticultural Crops

Subatex 300 EW Tebuconazole +	Triadimenol	Control of fungal diseases on vegetables and other horticultural crops and Powdery Mildew (Oidium Anacardii) on cashew
Rustall 375EC	tebuconazole + triadimenol	Control of fungal diseases on wheat and powdery Mildew Disease on Cashew
Shardim 250EC	Triadimenol 250g/l	Control of Powdery mildew on cashew
Amefidan 250 EC	Triadimenol 250g/l	Control of various Fungal diseases on Horticultural Crops
Trifidan 250 EC	Triadimenol 250g/l	Control of Fungal diseases on Horticultural Crops
Moleton 25 WP	Triadimenol 250g/kg	Control of Fungal diseases on Horticultural Crops
Falmenol 250EC	Triadimenol 250g/l	Control of Powdery Mildew on cashew
Powershot 250EC	Triadimenol 250g/l	Control of Powdery Mildew on cashew
Rust Killer	Tebuconazole 16.5% plus Triadimenol 8%	Control of Leaf rust on wheat
Badimenol 250EC	Triadimenol 250g/L	Control of Powdery Mildew (Oidium acacardii Noack) on Cashew
Bajuton 250 EC	Triadimenol 250g/L	Control of Powdery Mildew (Oidium acacardii Noack) on Cashew
Sevenmenol 25WP	Triadimenol 250g/L	Control of Ascochyta blight, Powdery mildew in Garden peas
Agromenol Super 300EC	Triadimenol 150g/L + Tebuconazole 150g/L	Control of Late Blight Diseases on tomatoes
Twigamenol 250EC	Triadimenol 250g/L	Control of Powdery Mildews on Sunflower
Fortrinol 250EC	Triadimenol 25%	Control of Late blight diseases of Tomatoes
Dimenozen 25% EC	Triadimenol 25%W/V	Control of Late blight diseases of Tomatoes
Triadimag 250 EC	Triadimenol 250 g/l	Control of powdery Mildew Disease on Cashew
Tokalix 860 OI	Tridemorph 860g/L OI	Control of Powderly mildew on roses
Procure 480 SC	Triflumizole 480g/L	Control of Various fungal diseases on horticultural Crops
Emizole 400 SC	Triflumizole	Control of Various fungal diseases on horticultural Crops
GROWTH REGULATOR (GR)		

Daminox 85%WSG	Daminozide 850g/Kg	Growth regulator on horticultural Crops
B- Nine 85 WSG	Daminozide 85%	Growth regulator on horticultural Crops
Orca 125EC	Fluazifop-P-Butly 125g/l	Artificial Ripener on sugarcane
Prime+125	Flumetralin 125 g/l	Control of Suckers on tobacco
Tobralin 305EC	Butralin 180g/L + Flumetralin 125g/L	Control of tobacco suckers
Stopper 330 EC	Pendimethalin 33%	Control of Suckers on tobacco
RESTRICTED REGISTRATION		
Quickphos	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Phostoxin Pellets	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Phostoxin Tablets	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Detia Ex-B	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Alu Tabs	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Fumaphos	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Celphos 56%	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Baluphos 56%	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Fumitoxin Tablets	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Elumiphos	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Salphos 56	Aluminium Phosphide 56%	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Fastphos 56% TB	Aluminium Phosphide 56%	Control of larger grain borer

		(Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize storage
Forfume 56%	Aluminium Phosphide 56%	For controlling Prostephanus truncatus, maize weevils in cereals
Carbaryl 85%WP;	Permethrin 98Technical Carbaryl 85g/kg ; Permethrin 98g/kg	For formulation purposes
Pyrinex 480EC	Chlorpyrifos 480g/l	Control of Chewing and Sucking pests on maize
Subagrain Dust CPM Technical	Chlorpyrifosmethyl	for Formulation purposes
Coal Tar Creosote E23	Coal Tar	Against Fungal decay, boring insects and termites in timber
Grenade 5%EC	Cyhalothrin	Control of Ticks and tse-tse flies on cattle
Ectopor 020AS	Cypermethrin 20g/l	Control of Ticks and tse-tse flies on cattle
Ectomin 100EC	Cypermethrin 100g/L	Control of Ticks and tse-tse flies on cattle
Ecofleece 10EC	Cypermethrin 100g/L	Control of Ticks and tse-tse flies on cattle
Decatix 5%	Deltamethrin 50g/l	Control of Ticks and tsetse flies on cattle
Spoton 1%	Deltamethrin 10g/l	Control of Ticks and tsetse on cattle.
Vapona 500EC	Dichlorvos 500g/l	Control of Larger grain Borer , maize weevils and household insects on Disinfestation of Storage Structures for Maize , Public health
DDV 50EC	Dichlorvos 500g/l	For Timber treatment in Building sites
Bachlorvos 500EC	Dichlorvos 500g/l	Control of Prostephanus And Sitotroga Truncatus Selealella on Disinfestation of Storage Structures for Maize
Roach 500 EC	Dichlorvos 500g/L	Control of Prostephanus Truncatus And Sitotroga Selealella on Disinfestation of Storage Structures for Maize
Nuvan 50 EC	Dichlorvos 500g/l	Control of Larger grain Borer , maize weevils and household insects on Disinfestation of Storage Structures for Maize , Public health
Nuvacel 500 EC	Dichlorvos 500g/Lt	Disinfestation of storage structures used for Cereals and Maize
Volmuron 430SC	Paraquat 130g/l + Diuron 300g/l	Control of Broad leaf and grass weeds on sugarcane
Bramuron 536SC	Paraquat + Diuron	Control of Broad leaf and grass weeds on sugarcane

Ethylene Dibromide (tech)	ethylene dibromide	for Formulation purposes
Locufen 96ULV	Fenitrothion 960g/l	Control of red locust on various crops
Sucker Off 305EC	Butralin 180g/L + Flumetralin 125g/L	Control of Suckers on tobacco
Yavikonyo Super 305EC	Butralin 180g/L + Flumetralin 125g/L	Control of Suckers on tobacco
Suckering Super 305 EC	Butralin 180g/L + Flumetralin 125g/L	Control of Suckers on tobacco
Yamaotea Super 305EC	Butralin 180g/L + Flumetralin 125g/L	Control of Suckers on tobacco
Fubalin 305 EC	Butralin 180g/L + Flumetralin 125g/L	Control of Suckers on tobacco
Sakasi Super 305EC	Butralin 180g/L + Flumetralin 125g/L	Control of Suckers on tobacco
Bamex 305 EC	Flumetralin 12.5% + Butralin 18%	Control of Suckers on tobacco
Tobralin 305 EC	Butralin 180g/L + Flumetralin 125g/L	Suckers
Subaprid Technical	Imidacloprid 99%	For formulation purposes
Degesch Plate	Magnesium Phosphide	Control of larger grain borer (Prostephanus truncatus) and weevils (Sitophilus zeamais) on maize
Magnaphos 56%	Magnesium Phosphide 56%	For controlling P. Truncatus (Larger Grain Borer), S. Zeamais (Maize Weevil) in cereals
Farmerzeb(techn)	techn. Mancozeb	For formulation of Farmerzeb
Suba Methomyl 99 TC	Methomyl 99%	Formulation of Methomyl
Paraforce 200 SL	Paraquat Dichloride 200g/l	Weeds control Euphobia hirta, Galinsoga paruiflora, Argeratum conyzoides, Bidens pilosa, Portulacae oleracea, in capscium field
Sixoquat 200 SL	Paraquat Dichloride 200 g/l	Weeds control (Commelina , Conyza, Ipomoea, Malva ,Plantago, Portulaca), Lolium) and weeds with rhizomes, bulbs or tubers (e.g. Cyperus) in banana
Muparaxone 276EC	Paraquat Dichloride 200g/ l	Control of Broad leaf and grass weeds on tomatoes
Goguzot 200SL	Paraquat Dichloride 200g/l	Control of Broad leaf and grass weeds on horticultural Crops
Tanzaquat 20SL	Paraquat Dichloride 200g/l	Control of Broad leaf and grass weeds on tomatoes

Panter 240 EC	Paraquat Dichloride 200g/l	Control of Broad leaf and grass weeds on tomatoes
Clear-Out 200SL	Paraquat Dichloride 200g/l	Control of Broad leaf and grass weeds on tomatoes
Paraxone 200SL	Paraquat Dichloride 200g/l	Control of Broad leaf and grass weeds on sugarcane
Olyset TC	Permethrin 2%w/w	Technical material for Olyset net treatment
Pouracide	alphamethrin 0.7% + tetrachlorvinphos 2% + PBO 7.5%	Control of Ticks and tse-tse flies on cattle
RODENTICIDES		
Brodek 0.05	Brodifacoum 0,05%	Control of Rodents
Rat-cide	Bromadiolone 0.005%	Control of Rodents
Panyacide	Bromadiolone 0.005%	Mastomys natalensis, and Rattus rattus
PanyaKill	Bromadiolone 0.005%	Control of Mastomys natalensis, and Rattus rattus
Ex-Rat	Bromadiolone 0.005%	Control of Control of field and household rodents
Racumin bait Block	Coumatetralyl	Control of rats and mice
Yasodion	Diphacinone 0.05%	Control of Against rats and mice in rice