

NATIONAL PLANT PROTECTION CENTRE  
DEPARTMENT of AGRICULTURE  
MINISTRY of AGRICULTURE & FORESTS  
SEMTOKHA



“Walking the Extra Mile”

NPPC/ADM-16/2020-2021/

Date: 10/08/2020

1. DAOs ( Bumthang, Chukha, Dagana, Gasa, Haa, Lhuntse, Mongar, Paro, Pemagatshel, Punakha, Sarpang, Samtse, Samdrupjongkhar, Thimphu, Trashigang, Trongsa, Tsirang, Trashiyangtse, Wangdue and Zhemgang)
2. Director Ggeneral, BAFRA, MoAF, Thimphu
3. Program Directors(NC-OA Yusipang, ARDC Bajo, ARDC Wengkhari, ARDC Samtenling and National Seed Centre, Paro)
4. CEO, Mountain Hazelnut Venture Pvt. Ltd. Thimphu.
5. CEO, FMCL, Phuntsholing

**Subject: Pesticides demand for 2020 – 2021**

Dear Sir/Madam,

The NPPC is in the process of compiling the pesticides requirement for the fiscal year 2020 - 2021, and you are requested to submit the demand for the fiscal year latest by 31st August 2020. The demand must be submitted in view of pests (insects, disease and weeds) problems in your Dzongkhag. It must be realistic to reflect the actual requirement of your Dzongkhag/Institution. Over and or underestimation of demand will result in accumulation or shortage of pesticides. Any demand that arrives after the deadline will not be entertained by this office as we have to seek approval for procurement from the Ministry, MoAF.

Upon the receipt of chemicals from the suppliers, the NPPC will notify you all about the availability of chemicals, which should be lifted from NPPC store within the stipulated time, and at the same we deal on cash and carry system only, therefore you are kindly requested to adhere to it.

Kindly ensure the above detailed mechanism of pesticides procurement and distribution by informing the farmers of your Dzongkhags accordingly. You are requested to submit the demand as per attached format.

Yours sincerely,

Yeshey Dema  
**Program Director,**  
NPPC.

Cc

1. Director, DoA, MoAF, for kind information
2. Chief, APD, DoA, MoAF, for kind information

<u>Description/Items:</u>	<u>Dosage per liter</u>	<u>Pack size</u>	<u>Qty:</u>	<u>Target pests</u>	<u>Crops</u>
<b>Insecticides</b>					
Chloropyrifos 20%EC	4ml	100ml		termites, thrips, aphids, leafhoppers, plant hoppers, white flies, mealy bugs, scales, bugs, ants, sawflies, beetles, butterflies and moths, flies and midges, weevils	Apple, Walnut, Mandarin, Cabbage, Maize, Peas, Tomato
Cypermethrin 10%EC	1ml	100ml		Hoppers, Locust, Aphids, Bugs, Sawflies, Beetles, Butterflies and Moths, Flies and Midges, Armyworm	Apple, Walnut, Mandarin, Cabbage, Maize, Peas, Tomato
Fenvelerate 0.4D	2kg/acre	kg		Crickets, Thrips, Termites, aphids, Hoppers, White Flies, Melay Bugs, Scales, Bugs, Ants, Sawflies, Beetles, Butterflies and Moths, Flies and Midges	Vetables
Imidacpride 20%SL	1ml/4lts	100ml		Mites, grasshopper, locusts, thrips, aphids, hoppers, white flies, mealy bugs, scales, bugs, flies and midges.	Mandarin, Apple
Malathion 50%EC	2ml	100ml		Armyworm, Grasshoppers, Locusts, Crickets, termites, thrips, aphids, hoppers, white flies, mealy bugs, scales, bugs, ants, sawflies, beetles, butterflies and moths, flies and midges	Apple, Walnut, Mandarin, Cabbage, Maize, Peas, Tomato
<b>Fungicides</b>					
Captan 50%WP	2gm	250gm		damping-off, botrytis blossom blight, powdery mildew, anthracnose, rust, brown rots, early blight and late blight, apple scab, brown rot on peaches, black spot	Apple Seed treatment
Carbendazim 50%WP	1gm	250gm		leaf spot and rust of wheat and sheath blight, leaf scald and rice blast diseases of paddy.	Apple, Ginger
Copper Oxycloiride 50%WP	2gm	100gm		Scab, Anthracnose, , Downy mildew, Early blight, and Late blight diseases of various crops	Chili, Mandarin, Apple (apply on cut portion with oil)
Copper Shlphat 50WP	2gm	500gm		algaecide, rootkiller	Buleberry, tomato, Watermelon, Onion, Carrot, Cabage
Hexaconazole 5EC	2ml	100ml		Scab, blast, sheath blight, leaf spot, powdery mildew	Apple
Mancozeb 75%WP	2ml	250gm		Black & Yellow rust, Downy Mildew, Early & Late blight, Buck eye rot, Leaf spot.	Apple, Potato

Metalaxyl + Mancozeb(8% + 64%)	2gm	100gm	Early and late blights of potatoes and tomatoes; downy mildew mildew of cucurbits; scab of apple; sigatoka of banana	Chili, Apple, Potato
Sulphur80 WWP	2gm	250gm	Powdery Mildew, Rust, Leaf Spot	Citru, Apple, Peas
Tricyclazole 75%WP	1gm	100gm	Rice blast,blight	Rice
<b>Herbicides</b>				
Glyphosate 41SL	4-5ml	500ml	All weeds/crops	All weeda
Metribuzin 70WP	1.5	250gm	Potato weeds	Potato, Sugarcane, Soyabean, Wheat, Barly, Tomato
Sunrice	50gm/250lt s/acre	50gm	Broad leaf weeds and sedges in transplanted ri	Rice
Butachlor 5G	10kgs/acre	10kgs	Paddy weeds	Rice
<b>Non-Toxic/Bio-pesticides</b>				
Azadirachtin 0.3% (Neem Oil)	4-5ml	100ml	All	General
TSO (HMO)	30ml	liter	Scale, helmet scale	Apple, Peach,Plum, Apricot (all temperate fruits plants)
Sticker/Activator/Spreader	1ml	250ml	All	With all

**Pheromone lures and traps**

Description/Item	Requirement per acre	Pack size	Qty	Target pests	Target crop	Remark
Fall armyworm lure	4 no's	1 no per packet		Fall armyworm ( <i>Spodoptera frugiperda</i> )	Paddy & Maize	
Chilli pod borer lure	4 no's	1 no per packet		Chilli pod borer ( <i>Helicoverpa armigera</i> )	Chilli, beans, tomato	
Rice ear-cutting caterpillar lure	4 no's	1 no per packet		Rice ear cutting armyworm ( <i>Mythimna separata</i> )	Paddy & Maize	
Mango fruit fly lure	4 no's	1 no per packet		Mango fruit fly ( <i>Bactrocera dorsalis</i> )	Mango	
Red palm weevil lure	4 no's	1 no per packet		Red palm weevil ( <i>Rhynchophorus ferrugineus</i> )	Arecanut nut	
Fero-T® trap (funnel trap)	4 no's	1 no per packet		Lepidopteran pests	Cereals and vegetable	Required for fall armyworm, chilli pod borer & rice ear cutting armyworm lure
Coco trap	4 no's	1 no per packet		Red palm weevil	Arecanut nut	Required for red palm weevil lure
McPhail trap	4 no's	1 no per packet		Fruit flies	Fruits	Required for mango fruit fly lure