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भारतसरकार/ Government of India

कृषि एवं किसान कल्याण मंत्रालय / Ministry of Agriculture & Farmers Welfare
कृषि एवं किसान कल्याण विभाग / Department of Agriculture & Farmers Welfare
वनस्पति संरक्षण, संगरोध एवं संग्रहनिदेशालय / Directorate of Plant Protection, Quarantine & Storage
एनएच4, फरीदाबाद(हरियाणा) – 121 001/ NH-IV, Faridabad (Haryana) – 121 001

Dated: 03.11.2022

To,

The Director Agriculture
Government of Gujarat
Sector - 10, High Road, Krishi Bhavan,
Gandhinagar
Gujarat- 382010

Sub: Advisory on Safe & Judicious utilization of 'Paclobutrazol' Plant Growth Regulator -reg.

Sir,

It has come to the notice of this Directorate that 'Paclobutrazol' Plant Growth regulator (PGR) is being used indiscriminately in various crops including vegetables and cereals by the farmers of Gujarat state & considering huge profit margin, agri-input dealers may find it lucrative for selling this PGR product therefore dealers might be suggesting use of this PGR to the farmers.

It is pertinent to mention that acute toxicity data indicates Paclobutrazol (PBZ) is moderately acute toxic by oral and inhalation routes, while it is low acute by dermal route of application. The product is slight irritating to skin & eyes and very toxic to aquatic life thus the product/formulation containing molecule may be avoided near aquaculture and it is having high mobility, high stability and potential for bioaccumulation, involving risk to soil & ecosystem.

'Paclobutrazol' 23% w/w SC is a Plant Growth Regulator (PGR) is mainly used for reducing the vegetative growth and induces flowering & enhancing the yield in several horticultural crops. It is recommended for growth regulation in Mango, Pomegranate, Apple, Cotton and Groundnut crops as per details given at **Annexure-1** (Copy enclosed). Which is available at DPPQ&S website at link <http://ppqs.gov.in/divisions/cib-rc/major-uses-of-pesticides>.

Contd Page No. 2

Further, it is known that indiscriminate and injudicious use of Agro chemicals including Paclobutrazol in agriculture may results in several associated adverse effects such as environmental pollution, ecological imbalances, human and animal health hazards, pesticides residues in food, fruits and vegetables, fodder, soil and water, pest resurgence, destruction of non targeted organisms including bio-control agents etc.

It is therefore, requested to issue necessary direction to field functionaries for sensitizing farmers and agri-input dealers to prudently use Paclobutrazol Plant Growth Regulator at recommended doses on approved crops only and to stop its use on crops on which it is not approved by the Registration Committee (RC).

Encl: as above

Yours faithfully


(Dr. J.P.Singh)
Plant Protection Adviser

Copy for information:

1. PPS to Joint Secretary(PP), DA & FW, Krishi Bhawan, New Delhi- 110001
2. Director (PP), DA & FW, Krishi Bhawan, New Delhi- 110001
3. PPS to PPA for information
4. Officer In-charge, CIPMC, Vadodara with directions to ensure and necessary follow-up with the state authorities and sensitize farmers and agri-input dealers.

S.No	Name of the Tree /Crop	Age of Tree/Crop	Active ingredient	Dosage/Tree	Dilution in water	Waiting period between last spray to harvest
1.	Mango	7-15 Years 16-25 Years >25 Years (To reduce the inter node length of new shoots and earlier formation of terminal bud. Favourably, influence the fruit bud production, fruit colour and harvest yield)	3.45 4.6 5.75-9.2	15ml/tree 20ml/tree 25-40ml/tree (Note: If the soil is sandy the rate of application may be reduced to 75 % of the recommended. For repeat use the rate of application can be 50 to 75 % of the rate used in the 1st year)	Recommended quantity diluted in clean water of 5 litres and applied in furrow 5 to 10 cm deep about 30 cm away from the trunk. Fill up with soil after application or apply as soil - collar drench.	
2.	Pomegranate	To induce flowering and enhance yield	0.69g a.i/ha	3.0 ml/tree	2L Recommended as soil drench (single application) ring form furrow to be made at a depth of 5-7 cm around plants and soil drenching to be done in active root zone and covered with soil.	83
3.	Apple	To induce flowering and enhance yield	2.3 g a.i/tree	10 ml/tree	5L Recommended as soil drench (single application) Treatment should be drenched in soil in circular area 25 cm away from tree stem. (Dormant stage)	155
		To induce flowering and enhance yield	0.46g.a i/L itre water (460ppm)	2ml/Litre (2000 ppm)	3L Recommended as foliar spray (single application) with the help of high volume knap sack sprayer (at green tip stage)	134
4.	Cotton	To restrict vegetative growth prevent shedding of squares/bolls & enhance yield	34.50g a.i/ha	150ml/ha	500 L/ha	42
5.	Groundnut	To enhance yield by restricting growth	28.75g a.i/ha	125 ml/ha	500 L/ha	70