

Annexure III Pests and diseases of Crops

District: Solan									
1	2	3	4	5	6	7	8	9	10
Host	Insect/ animal	Scientific name	Local name	Habitat	Time/ season of attack	Management mechanism	Associate d TK	Other details	Community knowledge holder
Maize	Cutworm	<i>Agrotis ipsilon</i> <i>A. segetum</i>	Katua Keet/ Toka	<ul style="list-style-type: none"> • Found during day time hiding in soil close to stems. • Larva cut the seedling plants and feed. 	April-June & Oct-Nov	<ul style="list-style-type: none"> • Hand picking and destruction of larvae. • Apply chlorpyrifos 20 EC @ 2 litres/ ha. 	-	-	-
	White grubs	<i>Phyllognathus dionysius</i>	Safed Gidar	<ul style="list-style-type: none"> • Soil dwelling grubs are present in soil at a depth of 5-20 cm. • Grubs feed on underground stem and roots tubers. 	June-Oct	<ul style="list-style-type: none"> • Plough the fields to expose grubs to predators. • chlorpyrifos 20 EC @ 2 litres/ ha after mixing with 20-25 kg of sand. 	-	-	-
	Maize Stem Borer	<i>Chilo partellus</i>	Tane ki sundi	<ul style="list-style-type: none"> • larvae first feed on the leaves, making a few shot holes. • Central shoot withers and leading to dead heart. 	July	<ul style="list-style-type: none"> • Remove the dead-hearts and infested plants. • Apply 2 g phorate (Thimmet 10G) per meter of row length. 	-	-	-
	Corn leaf aphid	<i>Rhopalosiphum maidis</i>	Tela	<ul style="list-style-type: none"> • Aphids infest leaves, leaf sheaths and inflorescences. • Most severe damage occurs to the tassel. 	September	<ul style="list-style-type: none"> • Foliar spray of imidacloprid 200SL or thiamethoxam 25 WDG @ 0.005%. 	-	-	-
Paddy	Leaf folder	<i>Cnaphalocrocis medinalis</i>		Caterpillars infest leaves of young plants by fastening the edges of the leaf together and live inside rolled	Occasional / at vegetative stage	<ul style="list-style-type: none"> • Clip-off the affected leaves. • Remove weeds especially graminaceous ones 	Clip-off the affected leaves		Local people

				leaf. Occasionally cause serious damage at vegetative stage		<ul style="list-style-type: none"> • Spray 1250 ml chloropyriphos 20 EC (per 500 L water/ha on pest appearance. 			
	Stem borer	<i>Scirpophaga innotata</i>		Damage is caused by feeding of the larvae within the stem. The damaged plants result in 'dead heart' and 'white head' formation	Occasional at vegetative stage	<ul style="list-style-type: none"> • Apply carbofuran (Furadan 3 G) by broadcasting in 3-4 cm deep standing water @ 1 kg/ha (a.i.) 10 days after transplanting, if necessary. • Spray 500 ml methyl parathion (Metacid 50 EC) in 500 L water/ha. Repeat after 45 days. 			Local people
	Leaf hopper	<i>Nilaparvata lugens</i>		Nymphs and adults of hoppers cause heavy damage to this crop by sucking the sap from various parts of the plant during July-September. Cause 'hopper burn' symptoms	Regular	<ul style="list-style-type: none"> • Spray 1250 ml Chloropyriphos 20 EC or 1500 g carbaryl 50 WP per 500 L water/ha on appearance of pest. 			
Wheat	Termite	<i>Odontotermis obesus, Microtermis obesi</i>	Deemak	Infest crop at germination stage. Cause yellowing and patchy growth of wheat visible from seedlings to maturity	Regular	<ul style="list-style-type: none"> • Remove stubbles of previous crop before sowing. • Termite mound should be destroyed in vicinity of crop • Seed treatment with chlorpyriphos 20 EC (4ml/kg seed) 			

						<ul style="list-style-type: none"> • Soil application of 2lt.chlorpyriphos 20 EC mixed in 25 kg sand per ha at the time of sowing 			
	Aphid	<i>Rhopalosiphum maidis, Sitobion avenae</i>	Tela	Suck sap from soft leaves, stem and developing grains from December till crop maturity and ultimately inhibiting grain formation	Regular	<ul style="list-style-type: none"> • Follow common cultural, mechanical and biological practices • Spray 750 ml methyl demeton 25 EC or dimethoate 30EC in 750 l water/ ha • Generally, natural enemies present in the field help in controlling the population of this pest 	Dusting of wood ash		Local people
Mash	Blister beetle	<i>Mylabris pustulata</i>	Ghodi	Adults feed voraciously on flowers	Regular/ at flowering and pod bearing stage	<ul style="list-style-type: none"> • Collect and destroy beetle • Spray 625 ml methyl parathion (Metacid 50 EC) in 625 L water/ha at the tasselling stage, if required. 	Collect and destroy beetles		Local people
	Black bean bug	<i>Chauliops spp.</i>	-	Leaf sap feeder	May-September	-	-	-	-
Rapes eed-mustard	Cabbage aphid	<i>Brevicoryne brassicae</i>	Tela		Rabi *	<ul style="list-style-type: none"> • Spray methyl demeton 25EC or dimethoate 30EC @ 1ml/l. • If crop is meant for 'Sag' purpose, then 			

						spray malathion 50EC @ 1ml/l and observe 1 week waiting period			
	Mustard aphid	<i>Lipaphis erysimi</i>	<i>Tela</i>		-do-	• -do-			
	Green peach aphid	<i>Myzus persicae</i>	<i>Tela</i>		-do-	• -do-			
	Mustard saw fly	<i>Athalia lugens proxima</i>	-		-do-	• Spray malathion 50EC @ 1ml/l			
	Cabbage butterfly	<i>Pieris brasscae</i>	-		-do-	• -do-			
	Pea leaf miner	<i>Chromatomyia horticola</i>	-		-do-	• Spray methyl demeton 25EC or dimethoate 30EC @ 1ml/l. in crop meant for seed			
	Painted bug	<i>Bagrada hilaris</i>	-		-do-	• -do-			
	Flea beetle	<i>Phyllotreta cruciferae</i>	-		-do-	• -do-			