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The Study of the Effectiveness of Different Insecticides Againest Jassid, Amrasca Devastans Dist on Okra District Kalat, Balochistan

Abdul Fatah[1], Rehana Karim[2], Shahzahd Bukhari[3], Abdul Majeed[4], Zahid Hameed[5]

[1]Department of Agriculture Saryab Farm District Mastung Balochistan.
[2]SST, (SC) Governament Girls High School Kachi Baig Quetta Balochistan.
[3]Department of Entomology Sind Agriculture UniversityTtando Jam .
[4]Abdul Majeed Principal Governament Polytechnic Institue, Saryab Road Quetta Balochistan .
[5]Engineering university of khuzdar Balochistan.
Corresponding Author ; fatehsheikh1978@gmail.com
Corresponding Author Contact No…0333 8919994

Abstract: *Field evaluation of different insecticides in controlling of Amrasca devastans Dist.on okra crop were carried out Agriculture farm district kalat during kharif 2017. The experiment was laid out in complete Randomized Block Design providing five treatmen with control and ith four replications .five leaves per plant and five plants per treatment were kept under observayion and counts of nymphs and adults of jassid were recorded 24,48.72 hours and 7 days treatments .the overall results after the interval of 7days indicated that highest reducation in the population jassid per leaf on okra was brought by confidor insecticide 98.18% konckdowna affect is butter than other,it was followed by deltaphos 89.28 %,polo 87,26 and lorsban 82.41% , it was found that confidor was better chemical in controlling jassid population ,confidor as high toxic immediately after spary. While Deltaphos.polo.and lorsban were comparative less effective, However the statistical analysis of data indicate that all insecticides were effective and there was no significant difference between insecticides,*

Keywords; *insecticides. Effectiveness Jassid .Okra .kalat .Balochistan*

INTRODUCTION

Okra .Abelmoschus esculentus Lmoench,is an important kharif vegetable and mixed crop grown in indopak subcontinent , okra is member of Malavaceae family Genus Abelmoschus , this genus is distinct form hibiscus having a decidus type of calyx where as they persistent in the genus , the okra belong to the species Esculentus it is annual vegetable crop grown form seed in tropical and sub tropical parts of the world it has many local names in parts of the words.for example it is called Lady finger in England Gumo in the united sattes of America and Bhindi in Indo Pak regions .okra is requires a long worm seasons for it is growth and maturity . the blochistan ckthese deveop rapidly and also consumer prefer to eat.this is the cheapest commonly by poor as well as rich families khoso1994 .among the vegetable okra is good sources of vegetable as er 177 calory units per pounds .the soluble fiber of okra helps to lower serum chlolesterol there by reducing the risk of heart disease and cholesterol cancer wolford. This crops attack by number of pests right form sowing to harvesting which casues drastic reduction in the yield .the pest included fruit and shoot borer ,leaf roller sucking and chewing insects complex roots feeding insects . the jassid has been damaingmany crops in the whole world.the attack of leaf slow turning ofedeges down wards curling drying the region of ic veine and ultimately drop of mahal1994 and lohar.the jassid and other insects pest not only reduce the growth of plants but also transmit pathogenicdiseases satphay and Rai1999. Keeping the damage view the damage caused by jassid,present research was conducted to observed the field evaluation of different insecticides againest jassid on okra crop during kharif season of 2017 at Agriculture farm district kalat

MATERIALS AND METHODS

This study was carried out during 2017 in the field evulation of different inseitides againest okra jassid conducted by district kala during kharif 2017.

Experimental Design

The experiment was laid out in the randomized complete block design including control .the plot size were 30x30S yards.the polts were separate form keeping 12feet gap on all the sides as buffer zone or partion in each pots there are five rows.the outer row left as buffer and only for long centeral rows kept for the urpose of recordingobservation.the sees as sown plant to plant distance17cm.

Insecticides and their role

Four insecticides were chosen for this investigation and sparyed on 2,2,2017when the population build up the application was made after 37 days of sowing the spary down in the early morning hours on clean and clear days to avoid wind drift and mid dat temperature . the kanspack compression type sparyer as used for spary of one insecticides the tank was thoroughly clean and rinsed withclean water and rerinsed with the spary soulation of the next insecticide to be used.

Sampling Techniques

Befoe the application of the esticides pretreatment counts of the jassid were recorded at one day before spary and thepost counts recorded on five plants which randomly selected form the four centeral experimental row treatment. Form each randomly selected

plant five leaves ere examined one it is top two form middle and two form bottom portion. All the observation were made on the both side of leaves and both nymphs as well as adult stage of insects were counted in the morning hours in all the counting dates. The post treatment observation were recorded after the interval of 24,48,72,hours and seven days after insecticides treatments.

RESULTS.

The experiment on the evaluation of different insecticides againest jassid amrasca devastans on okra crop conducted during kharif season 2017 . during this research evalution of four insecitides , Deltaphos , Lorsban , Confidor , and polo.were against jassid on okra.the results table 2 releaved the after the interval of 24 hours application. Allthe insecticides effective and brought drastic reducation in the population of jassid.the higest pest reducation as observed in the plots sparyed with confidor 0.9 leaf it as followed by polo1.65 lorsban 2.4 and Deltaphos 2.6 . all the interval of 48 hours again the condifor showed same performance 0.4 leaf in the reducation of jassid population folloedby Deltaphos 2.4,polo28 and lorsban 3.9 leaf. Similarly after the 72 hours confidor brought higest reducation of jassid population 0.35 leaf folloed by the Deltaphos 2.4 ,polo 3.6 and lorsban 4.05 leaf after the interval of week onfidor remained more effective againest jassid 0.55 leaf followed by Deltaphos 3.05 polo 3.45 and lorsban 4.05 leaf . over all performance of 4 insectiides after 7 days was more less same . the means of all interval indicated that the highest reducation in population of jassid as brought by confidor insecticide 0.55 leaf it was followed by deltaphos 2.63 ,polo 2.87 and lorsban 3.60 per leaf . the results the indicated that confidor and Deltaphos were more effective insecticides againest jassid over all percentage of jassid population caused by confior insecticide was 98.10% percent this was followed by Deltaphos 89.28% percent polo 87.26% percent and lorsban 87.41% percent however threre was no significant difference between the insecticides how ever during the fruiting period the used of insesticides ill create human health problems and harm for pollinators and other beneficial insets.

DISCUSSION

We observed four insecticide againest jassid on okra crop. The jassid is most serious pest of okra crop in ditrict kalat Pakistan. This pest not only reduce the growth of plants but also transmit pathogenic diseases in , verma 19994 .the present study releaved that insecticide used in the present study highly effective in reducing the jassid population table 2 and 3 . the overall all performance of data indicated that at the interval of one week highest reducation percentage in jassid population asbrought by confidor insecticide 9828 percentage, it as followed by Deltaphos , polo, and lorsban it as folloed by Deltaphos polo and lorsban .

CONCLUSION

Confidor was better in controlling the jassid on okra crop after spray. Deltaphos was the next to the confidor in its effectiveness polo and lorsban were the least effective insecticides againest jassid.

Insecticides their formation Againest jassid Amrasca devastans:

Treats	***Trade Name***	***Chemical Name***	***Group***	***Dosage***
T_1	*Deltaphos*	*Trizophos+Deltaphos*	*Op py*	*500ml*
T_2	*Lorsban*	*Chloropyriphos*	*op*	*600ml*
T_3	*confidor*	*Imidacloprid*	*Nitrogoinadine*	*8ml*
T_4	*polo*	*Diafenthuron*	*thiourea*	*200ml*
T_5	*Control*	--	--	--

Table 1: Average Population of jassid insect Amrasca devastans on okra crop pre and post treatment after application of insecticides.

			7days	***Means***

Insecticides	*Pre treatment*	*Post treatment count*				
		24 hors	*48hors*	*72hors*		
Deltaphos	*17.35*	*2.6*	*2.4*	*2.5*	*3.05*	*2.63*
Lorsban	*18.35*	*2.4*	*3.9*	*4.05*	*4.05*	*3.60*
Confidor	*21.65*	*0.9*	*0.4*	*0.35*	*0.55*	*0.55*
Polo	*15.35*	*1.65*	*2.8*	*3.6*	*3.45*	*2.87*
Control	*17.3*	*15.1*	*17.45*	*20.45*	*27.35*	*20.8*
Average	*17.28*	*4.53*	*5.39*	*6.19*	*7.69*	

Table 2: Reuction percentage in the population of jassid Amrasca Devastans on okra crop after application of insecticides.

insecticides	*Post treatment Reduction*			*7days*	*Mean reduction %*
	24 hors	*48hors*	*72hors*		
Deltaphos	*86.42*	*89.15*	*90.36*	*91.20*	*89.28*
Lorsban	*88.14*	*83.33*	*85.22*	*88.85*	*86.41*
Confidor	*96.23*	*98.54*	*98.91*	*98.73*	*98.10*
polo	*90.30*	*85.69*	*84.30*	*88.75*	*87.26*

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