Hkkjrh; df"k vuqla/kku if=dk] 36(1): 29-31 DOI: 10.18805/BKAP294

puk Qly e Qyh Nnd dhV ¼*Helicoverpa armigera* L.½ dk tfod fu;=.k

ckc yky tkV] fuf/k] xkihpn flg] i'ik dekor

—f'k foKku dUn] ukxkj&I ukxkj —f'k fo"ofo|ky;] tks/kij&342 304] jkt LFkku] Hkkjr A

ikIr% tu 2021 Lohdr% tu 2021

lkjk"k

puk Qly e Qyh Nnd dhV ¼*Helicoverpa armigera* L.½ fu;=.k dk v/;;u ukxkj fty d dN fdlkuk d [kr ij vku Qke ijh{k.k d ek/;e l cgrj ik|kfxdh ¼Pheromone trap @ 5/ha + Coriander row (7/8:1) + *HaNPV* @ 250 LE/ha½ dk iHkko tkuu d fy;] o'k 2020&21 e fd;k x;kA bl ^"kk/k e irk pyk fd in"ku ik|kfxdh e 197.83 DohVy@gDV;j puk mRiknu gvkA in"ku ik|kfxdh d dkj.k puk Qly mRiknu e 34.11 çfr"kr dh c<krjh gbA çn"ku çk|kfxdh e "k) ykHk #i; 67036@gDV;j ikIr gvkA fdlku i)fr e "k) ykHk #i; 44525@gDV;j ikIr gvkA ykxr ykHk vuikr Hkh çn"ku çk|kfxdh e 3.26 ikIr gvkA fdlku i)fr e ykxr ykHk vuikr 2.60 ikIr gvkA

'kCn dthZ puk] Qyh Nnd dhVA

Bhartiya Krishi Anushandhan Patrika, 36(1): 29-31

Bio-rational Management of Pod Borer (*Helicoverpa armigera* L.) in Chickpea Crop

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ABSTRACT

On Farm Testing of Pheromone trap @ 5/ha + Coriander row (7/8:1) + *HaNPV* @ 250 LE/ha against pod borer (*Helicoverpa armigera* L.) management was assessed on farmers field in Nagaur district during 2020-21. Trial was conducted on 10 farmer's field to know the impact of said technology on chickpea pod borer management. In the demonstrated technologies the chickpea seed production 19.83 q/ha. The percent seed yield increase over the farmer's practices was 34.11%. The net return in demonstration technology was ` 67036/ha and the same was ` 44525/ha. The incremental benefit cost ratio was 3.26 in demonstration technology as compared to farmer's/ local check 2.60 respectively.

Key words: Chickpea, *Helicoverpa armigera,* Pod borer.

çLrkouk

Hkkjr n"k e nyguh Qlyk e ex rFkk vjgj Qly d Ckkn puk ,d e[; mi;kxh nky okyh Qly gA puk Qly n"k d fofHkUu Hkkxk e lnh] o xeh nkuk _rvk e ckb tkrh gA fo"o d puk {k= e Hkkjr n"k dk {k=Qy ¼9.6 yk[k gDV;j½ rFkk mRiknu ¼8.83 yk[k Vu½ dh nf'V l lcl T;knk fgLlk gA Hkkjr n"k e puk Qly dh vklr mit 940 fdyk ifr gDV;j vkdh xb gA fo"o d dy mRiknu e 65 ifr"kr mRiknu vdyk Hkkjr n"k mRiUu djrk gA n"k e fofHkUu nyguh Qlyk d mRiknu e puk Qly dk Hkkx lcl T;knk 46 çfr"kr gA n"k d fofHkUu jkT;k e jkt LFkku jkT; dk fgLlk djhc 14 çfr"kr gA puk Qly d de mRiknu dk dkj.k —'kdk e uohure rduhdk d Kku dk vHkko gkuk çe[k gA bld lkFk gh puk Qly e Qyh Nnd dhV dk idki gkuk ,d e[; dkj.k gA puk Qly e Qyh Nnd dhV d idki d dkj.k mRikndrk

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e Hkkjh deh n[kh xb g ¼flg vkj ;kno] 2009 ¼pk/kjh] o vU;] 2013½A Qyh Nnd dhV ij n"k e idki djrk g rFkk bld idki d dkj.k 50.60 ifr"kr rd dh deh vk tkrh g ¼ckfydkb] o vU;] 2001½A Qyh Nnd dhV fujrj [kkrk g vkj cht vdj.k l ydj Qly idu rd udlku djrk gA Qyh Nnd dhV dh o;Ld yV viu thou dky e yxHkx 30 l 40 Qfy;k dk [kkdj u'V dj nrh g ¼dekj ,o jk?ko] 2018½A —'kd rduhdk l puk mRiknu e cgr gh deh vkrh g tk fd cgrj rduhd viukdj nj dh tk ldrh gA bUgh lc ckrk dk /;ku e j[kdj vku Qke ijh{k.k d ek/;e l puk Qly e Qyh Nnd dhV ¼*Helicoverpa armigera* L.½ fu;=.k dk v/;;u cgrj ik|kfxdh ¼Pheromone trap @ 5/ha + Coriander row (7/8:1) + *HaNPV* @ 250 LE/ha½ d ek/;e l çLrkfor fd;k x;kA

lkexh ,o ijh{k.k fof/k

;g v/;;u —f'k foKku dUæ] ukxkj&ı d }kjk ukxkj fty e o'k 2020&21 d nkjku vku Qke ijh{k.k d ek/;e l puk Qly e Qyh Nnd dhV ¼*Helicoverpa armigera* L-) fu;=.k dk v/;;u cgrj ik|kfxdh (Pheromone trap @ 5/ha + Coriander row (7/8:1½ *HaNPV* @ 250 LE/h½ d ek/;e l fd;k x;kA bl v/;;u e fdlku rduhdk d fo:) cgrj rduhd dk eY;kdu fd;k x;kA —f'k foKku dUæ }kjk çnf"kr dh xb rduhd rFkk fdlku }kjk viukb xb rduhd fuEukulkj g &

—f'k foKku dæ }kjk çnf"kr dh xb rduhd

- Qyh Nnd dhV fu;=.k d fy, tfod dhVuk"kd ¼Pheromone trap @ 5/ha + Coriander row (7/8:1) + *Ha*NPV @ 250 LE/h½ —f'k fuonuk dk mi;kxA
- mPp x.koÙkk ;ä cht ¼th ,u th&1958½ dh f"kQkfj"kA
- cht dh drkjk e gh cvkb djuk rFkk drkj l drkj dh njh 30 lVhehVj j[ku dh f"kQkfj"kA
- tM xyu ,om[kVk jkx d çHkkoh ,o tfod fu;=.k gr VkbdkMek tfod QQn ¼6&8 xke çfr fdyk xke cht½ l cht mipkj dju dh f"kQkfj"kA
- jkbtkfc;e thok.k lo/ku l cht dk mipkj dju dh f"kQkfj"kA
- ih&,l&ch& lo/ku l cht mipkj dju dh f"kQkfj"kA
- Qyh Nnd dhV fu;=.k d fy, ,ekefDVu ctk,V 5 ,l&th& ¼100 xke çfr gDV;j½ dk mi;kxA

fdlkuk }kjk viukb tku okyh rduhd

- Qyh Nnd dhV fu;=.k dfy, vlQkr nokb dk mi;kx djukA
- ijkuk vkj fuEu x.koÙkk ;ä cht dk mi;kx djukA
- cht dk fNVd dj chtkb djukA
- chtkipkj dh tkudkjh u gkukA
- tM xyu ,om[kVk jkx l cpko dfy, chtkipkj u djukA
- jkbtkfc;e vkj ih&,l&ch& thok.k lo/ku l cht mipkj u djukA
- [kjirokj uk"kd nokb dk mi;kx u djukA

ifj.kke ,o foopuk

—f'k foKku dæ }kjk o'k 2020&21 e fd, x, v/;;u l irk Kkr gvk dh vku Qke ijh{k.k çn"ku d ek/;e l cgrj çnf"kr rduhd e fdlku dh vklr mit 19.83 fDoVy ifr gDV;j ¼rkfydk 1½ iklr gb rFkk bld foijhr fdlku i)fr e vklr mit 14.85 fDoVy ifr gDV; FkhA ifu;k ,o fifFk;k ¼2011½ rFkk tkV ,o vU; ¼2019½ d vulkj ;fn ub rduhdk t l Qyh Nnd dhV fu;=.k d fy, tfod dhVuk"kdk dk mi;kx fd;k tko rk fdlku vf/kd l vf/kd mit çklr dj ldr gA vkfFkd fo"y'k.k d v/;;u d vk/kkj ij ;g Kkr gvk dh çnf"kr rduhd e fdlku dh dy ldy vk; çfr gDV;j e :i; 96681 çfr gDV;j FkhA ;gh ldy vk; fdlku i)fr e :i; 72369 çfr gDV;j FkhA çnf"kr rduhd e Qyh Nnd dhV dk çdki Hkh fdlku i)fr dh ryuk e cgr de ¼09&07 ifr"kr½ Fkk ft ld dkj.k "k) ykHk Hkh çnf"kr rduhd e fdlku i)fr l dgh T;knk FkkA çnf"kr rduhd e ;g "k) ykHk #i; 67036 çfr gDV;j Fkk ¼rkfydk 1½A fdlku i)fr e ;g "k) ykHk :i; 44525 çfr gDV;j FkkA pk/kjh o lpu ¼1995½ d v/;;u l ;g fl) gkrk g fd Qyh Nnd dhV dk lefpr fu;=.k dju ij vklr mit rFkk "k) ykHk e c<krjh gkrh gA fdlku dk viuh rduhd l ;g ykHk çfr gDV;j de iklr gvk tk fd çnf"kr rduhd dh ryuk e dgh de FkkA çnf"kr rduhd e ykxr ykHk vuikr 3.26 FkkA ogh bld foijhr ;g ykxr ykHk vuikr fdlku rduhd e 2.60 FkkA blh çdkj dekjh ,o vU; ¼2015½ rFkk iVy ,o vU; ¼2002½ u Hkh ik;k dh Qyh Nnd dhV dk çdki Pheromone trap @ 10/ha + Bt + *HaNPV* @ 250 LE/ha mipkj e cgr gh de ¼3&63 ifr"kr½ gkrk g rFkk puk Qly mRiknu e c<krjh gkrh gA

milgkj

mijkä v/;;u l Kkr gvk dh —f'k foKku dUæ }kjk o'k 2021&21 e vku Qke ijh{k.k d ek/;e l puk Qly e Qyh Nnd dhV ¼*Helicoverpa armigera* L.½ fu;=.k dk

Table 1: Evaluation of pheromone trap and *Ha*NPV against chickpea pod borer.

S. No.	Technology option	No. of trials	Infestation of pod borer (%)	Yield (q/ha)	% Increase in yield over farmer's practice	Cost of cultivation (`/ ha)	Gross return (`/ ha)	Net return (`/ ha)	Benefit cost ratio
T_1	Spray of insecticides (Monocrotophos 36SL @ 2 ml/lit; Farmers Practice)	10	27.06	14.85	-	27844	72369	44525	2.60
T_1	Installation of pheromone @ 5/ha + foliar application of *Ha*NPV @ 250LE + Coriander row (7/8:1)		09.07	19.83	34.11	29645	96681	67036	3.26

v/;;u cgrj ik|kfxdh ¼Pheromone trap @ 5/ha + Coriander row (7/8:1) + *HaNPV* @ 250 LE/h½ d ek/;e l Qyh Nnd dhV dk idki cgr de gkrk g rFkk Qly mRiknu e c<krjh gkrh gA çnf"kr rduhd e fdlkuk dh puk Qly dh mit e dkQh btkQk gvk tk fd ykxr ykHk vuikr l Kkr gk jgk gA bl v/;;u l ;g irk pyrk g dh fdlku –f'k foKku dUæ d oKkfudk }kjk çnf"kr dh tku okyh rduhdk dk viukdj o crkb tku okyh flQkfj"kk dk [kr e ykx djd vf/kd l vf/kd mRiknu çkIr dj ldr g rFkk n"k e pu dh Qly dk mRiknu c<k ldr gft ll fd n"k nygu lEi.k cu ldA

InHk

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