Hkkjrh; df"k vuqla/kku if=dk] **35**(3): 193-196 DOI: 10.18805/BKAP244

ljlk Qly e Aphid dhV fu;=.k d fy; Imidacloprid 17.8% SL vkj yellow sticky trap dk eY;kdu

ckc yky tkV*

—f"k foKku dUn] ukxkj-I, —f"k fo'ofo|ky;] tks/kij&342 304] jktLFkku

ikIr% vDrcj 2020 Lohdr% vDrcj 2020

lkjk'k

iFke ifDr in'ku d vrxr Imidacloprid 17.8% SL vkj yellow sticky trap dk ljlk Qly e aphid dhV dk fu;f=r dju d fy, eY;kdu o"k 2018-19 rFkk 2019-20 e fd;k x;kA ;g v/;;u dju ij irk pyk fd fdlku i)fr dh ryuk e in'ku ik|kfxdh e ljlk Qly mit e o"k 2018&19 rFkk 2019&20 e ifr'kr of) Øe'k% 18-52 ifr'kr rFkk 26-99 ifr'kr FkhA çn'ku çk|kfxdh e o"k 2018&19 rFkk 2019&20 e 'k) ykHk 45680 ,o 62806 #i;@gDV;j gvkA ;fg 'k) ykHk fdlku i)fr e Øe'k% 24600 ,o 30662 #i;@gDV;j FkkA ykxr ykHk vuikr Hkh çn'ku çk|kfxdh e o"k 2018&19 rFkk 2019&20 e Øe'k% 1%2-34 rFkk 1%3-17 ikIr gvkA fdlku i)fr e ykxr ykHk vuikr o"k 2018&19 rFkk 2019&20 e Øe'k% 1%2-19 rFkk 1%2-72-

'kCn dthZ ljlk] Aphid, ihy fpifpi tky] bfeMkDykfiMA

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Evaluation of yellow sticky trap and imidacloprid 17.8% SL against mustard aphid on farmers field

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ABSTRACT

Performance of yellow sticky trap and imidacloprid 17.8% SL was assessed on farmers field through front line demonstrations. The per cent increase in the yield under demonstration technology was 18.52 % and 26.99 % over the farmers practices during both the year 2018-19 and 2019-20, respectively. Under the demonstrated technology, farmers were got maximum net return of Rs. 45680/ha and Rs. 62806/ha in the year 2018-19 and 2019-20, respectively followed by Rs. 24600/ha and 30662/ha net return under farmers practice. The cost benefit ratio was also higher (1:2.34 and 1:3.17) under demonstration technology as compared to farmers practices (1:2.19 and 1:2.72) in the year 2018-19 and 2019-20, respectively.

Key words: Mustard, Aphid, Yellow sticky trap, Imidacloprid.

iLrkouk

Hkkjr n'k ljlk Qly dk mRiknu dju e vx.kh n'k gA ljlk {k=Qy dh nf"V l nfu;k e Hkkjr dk igyk LFkku gA [kku ;kX; fryguh Qlyk e ljlk Qly dk vdy 28-6 ifr'kr dk ;xnku gA 'k[kkor ,o vU; 2012½A ljlk jktLFkku dh ,d ie[k jch e ckb tku okyh fryguh Qly gA bldh [krh jkT; d lHkh ftyk e dh tkrh gA mRrjh jktLFkku e ;g Qly o"kk ij vk/kkfjr gA ljlk Qly e djhc 50 rjg d dhV ,o chekfj;k Qly mXkku l ydj dVkb rd udlku djr g ¼'kek ,o flg 2010½] ftle ,fQM ¼vy ;k ek;yk½ ,d e[; udlku dju okyk dhV gA ;g dhV ljlk Qly d Qy l] ru l] "kk[kkvk l rFkk ub "k[kkvk vkfn l jl plrk g ftll fd ik/kk ckuk jg tkrk g vkj ik/k ij Qfy;k o cht ugh cur g vkj mit e Hkkjh deh gk tkrh gA bl dhV l Qly mit e 96 ifr'kr rd udlku gk tkrk g vkj ljlk d ry e 5&6 ifr'kr dh fxjkoV n[kh xb g ¼'ky'kk ,o vU; 2006½A ljlk dh fofHkUu tkfr;k

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rkfydk 1 % o"k&2018 19 d in'ku e ikIr vkdM ,o ifj.kkeA

S. No.	Technology Option	No. of trials	Infestation of aphid (%)	Yield (q/ha)	% Increase in yield over farmer's practice	Cost of cultivation (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
T_1	No spray (Farmers Practice)	10	24	13.5	-	20625	45225	24600	2.19
T_2	Spray of Imidacloprid @ 150 ml/ha (Recommended Practice)		10	16.0	18.52	22937	53600	30663	2.34
T_3	Installation of yellow sticky trap @ 20/ha (Recommended Practice)		13	15.0	11.12	22927	50250	27313	2.20

rkfydk 2 % o"k&2019&20 d in'ku e ikIr vkdM ,o ifj.kkeA

	Area (ha)	Demo yield (q/ha)	Local (q/ha)	Increase in yield (%)	Cost of Cultivation (Rs/ha)		Gross Return (Rs/ha)		Net Return (Rs/ha)		Benefit: Cost Ratio	
					Demo	Local check	Demo	Local check	Demo	Local check	Demo	Local check
Average	4 ha	20.7	16.3	26.99	28946	26625	91752	72305	62806	45680	3.17	2.72

e bl dhV l vyx&vyx txgk ij Hkkjh udlku n[kk x;k gA D;kfd ;g dhV cgr NkVk gkrk g blfy, ;g lgh l fn[kkb ugh nrk vkj fdlku bl dhV dk vun[kk dj ldrk gA dgh&dgh txgk ij bl dhV e cgr lh dhVuk'kd nokvk d ifr dhVuk'kd ifrjk/k n[kk x;k gA vr% bl dhV dk dkb Hkh iHkkoh fu;=.k ugh dju ij Hkkjh udlkku gk tkrk gA ljlk ,d cgmi;kxh rFkk fu;kr mUe[k Qly g vkj n'k dh vkfFkfrdh e egRoi.k LFkku j[krh gA blhfy, bl dhV dk fu;=.k djuk cgr t:jh gk tkrk gA blhfy, ljlk d bl vkfFkd egRoi.k ifjn'; dk/;ku ej[kdj ;g v/;;u fdlkuk d [kr ij çLrkfor fd;k x;k gA

lkexh ,o ijh{k.k fof/k

;g v/;;u —f"k foKku dUæ] ukxkj-I d }kjk ukxkj fty e dN fdlkuk d [kr ij o"k 2018&19 rFkk 2019&20 e iFke ifDr in"ku d ek/;e l fd;k x;kA bl v/;;u e yellow sticky trap vkj Imidacloprid 17.8% SL dk ljlk Qly e aphid dhV dk fu;f=r dju d fy, eY;kdu fd;k x;kA bl v/;;u e dy rhu mipkj dh ryuk dh xb rFkk aphid dhV dk çdki tkpk x;kA —f"k foKku dUæ] ukxkj-I }kjk çnf'kr dh xb e[; rduhd fuEukulkj g &

1 Installation of yellow sticky trap @ 20/ha
2. Spray of Imidacloprid 17.8% SL 150 ml /ha
3. Farmers practice (No spray)

ifj.kke ,o foopuk

—f"k foKku dUæ] ukxkj-I }kjk o"k 2018&19 rFkk 2019&20 e iFke ifDr in'ku d ek/;e l fd, x, v/;;u l Kkr gvk dh in'ku ik|kfxdh rFkk fdlku i)fr e aphid dhV dk çdki Øe'kh 10] 13 ,o 24 çfr'kr rFkk 8 ,o 26 çfr'kr FkkA uk;d ,o vU; 2014 u ik;k dh ;fn yellow sticky trap dk 25 ifr gDV;j dh nj l mi;kx fd;k tk; rk aphid dhV dk çdki cgr gh de gkrk gA blh de e noh ,o c:ok 2012 u Hkh ik;k dh Imidacloprid 17.8% SL dk 20 ,o 60 g ai/ha dh nj l fNMdko dju ij aphid dhV dk çdki cgr gh de gkrk g rFkk ykxr ykHk vuikr Hkh lcl T;nk ikIr gkrk gA çnf'kr rduhd dk e[; çHkko ljlk Qly dh mit e fn[kkb fn;k ftle fd ljlk Qly dh vklr mit o"k 2018&19 rFkk 2019&20 e Øe'kh 16-0] 15-0 rFkk 20-7 fDo@gDV;j ¼rkfydk 1 ,o 2½ FkhA ;fg ljlk Qly dh vklr mit fdlku i)fr e Øe'kh 13-5 rFkk 16-3 fDo@gDV;j FkhA çnf'kr rduhd e fdlku i)fr d foijhr ljlk Qly dh vklr mit e çfr'kr of) o"k 2018&19 rFkk 2019&20 e Øe'kh 18-52] 11-12 rFkk 26-9 FkhA noh ,o c:ok 2012 u ik;k dh ljlk Qly dh mit e cgr vf/kd c<krjh gkrh g vxj Imidacloprid 17.8% SL dk fNMdko fd;k tk;A vkfFkd fo'y"k.k d v/;;u d vk/kkj ij ;g Kkr gkrk g dh çnf'kr rduhd e çfr gDV;j ykxr eY; o"k 2018&19 rFkk 2019&20 e Øe'kh 22937] 22927 ,o 20625 #i;@gDV;j rFkk 28946 ,o 26625 #i;@gDV;j ¼rkfydk 1 ,o 2½ FkhA blh rjg çfr gDV;j dy ldy ykHk çnf'kr rduhd ,o fdlku i)fr e Øe'kh :i; 53600] 50250 ,o 45225 rFkk 91752 ,o 72305 FkkA çfr gDV;j 'k) ykHk Hkh çnf'kr rduhd ,o fdlku i)fr e o'k 2018&19 rFkk 2019&20 e Øe'kh :i; 30663] 27313 ,o 24600 rFkk 62806 ,o 45680 FkkA ykxr ykHk vuikr dk v/;;u dju ij irk pyk dh çnf'kr rduhd e ykxr ykHk vuikr o'k 2018&19 rFkk 2019&20 e Øe'kh 2-34] 2-20 ,o 2-19 rFkk 3-17 ,o 2-72 FkkA

milgkj

—f"k foKku dUæ] ukxkj }kjk o'k 2018-19 rFkk 2019-20 e iFke ifDr in'ku d vrxr Imidacloprid 17.8% SL vkj yellow sticky trap dk ljlk Qly e aphid dhV dk fu;f=r dju d v/;;u l irk pyk fd çnf'kr dh xb cgrj rduhd l fdlkuk dh ljlk Qly dh mit e c<krjh gb rFkk aphid dhV dk cgr de çdki ik;k x;k vkj ft ldk vlj fdlku dk çfr gDV;j gku oky 'k) ykHk d :i e gvkA bl v/;;u l ;g irk pyrk g fd 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 ljlk dh Qly dk mRiknu rFkk gku oky ykHk dk c<k ldr gA

lanHk

Devee, A. and Baruah, A.A.L.H (2012). Bio-efficacy of imidacloprid and bifenthrin against mustard aphid (*Lipaphis erysimi*) on *Brassica rapa* subsp *oleifera*. *Indian Journal of Agricultural Sciences*, 82(10): 845-851.

Sharma, P. and Singh, Y.P. (2010). Directorate of Rapeseed-mustard, Indian Council of Agriculture Research, Sewar, 321303, Bharatpur (Rajasthan). *Annual National Language Journal*, 1: 4751.

Shekhawat, K., Rathore, S. S., Premi, O. P., Kandpal, B. K. and Chauhan, J. S. (2012). Advances in agronomic management of Indian mustard (*Brassica juncea* (L.) Crenz. Cosson): An Overview. *International Journal of Agronomy*, 14.

Shylesha, A.N., Azad Thakur, N.S., Pathak, K.A., Rao, K.R., Saikia, K., Surose, S., Kodandaram, N.H. and Kalaishekar, A. (2006). Integrated management of insect pest of crops in north eastern hill region. Technical Bulletin No. 19. ICAR RC for NEH Region, Umiam, p. 50.

Nayak, U. S, Mishra, I. and Mishra, B. K. (2014). Field evaluation of bio-intensive IPM modules against important insect-pests of mustard under North Coastal-Plain Zone of Odisha. *Journal of Biological Control*, 24(4): 192-196.