

IMPACT OF TRAINING ON KNOWLEDGE LEVEL OF ROSE GROWERS ABOUT ROSE PRODUCTION TECHNOLOGY

A. B. Parmar¹, P. C. Patel² and A. C. Vaidya³

¹Assistant Professor, College of Horticulture, AAU, Anand-388 110 India

²Assistant Extension Educationist, DoEE, AAU, Anand- 388 110 India

³Senior Scientist & Head, KVK, AAU, Anand- 387240 India

Email: amita@aaui.in

ABSTRACT

The present study was conducted to access the impact of training on the knowledge level of rose growers about rose production technology in two purposively selected Taluka of Anand district of Gujarat State. Six villages (Tranol, Rasnol, Kunjarav, Zakhala, Rinza, Nabhoi) were selected purposively from both talukas, where training on "Rose Production Technology" was conducted by KVK, Anand during the last eight years. From each village, ten trained and ten untrained rose growers were selected randomly making a total of 120 respondents for the study. In the case of Knowledge, data revealed that the majority (73.33 per cent) of the trained rose growers had a high level of knowledge, followed by 18.33, 6.67 and 1.67 per cent of them had a medium, low and very high level of knowledge, respectively. Whereas, in the case of untrained rose growers 51.66 per cent had a medium level, followed by 28.33, 18.34 and 1.67 per cent had a low, high and very low level of knowledge, respectively. The mean score of the knowledge index of trained rose growers was found at 65.88 and the mean score of the knowledge index of untrained rose growers was found 48.67. The "t"-test was performed to compare both mean and found highly significant at 0.05 level of significance. So, there was a great impact of training on increasing the knowledge level of trained rose growers as compared to untrained rose growers.

Keywords: impact, rose growers, knowledge

INTRODUCTION

Commercial floriculture in India is a new dimension in farming culture. Pieces of evidence from all civilizations reveal that mankind has a historical interest in gardening and culturing flowers to satisfy the aesthetic need. But, in the present world, the flower becomes important not only for its aesthetic social values but also for its economic contribution (Aditya, 1992). People usually use flowers in all their ceremonies like weddings, birthdays, marriage day greetings, religious offerings and sometimes on social, political and historical occasions. The universal usage has created a real trend of producing flowers on a commercial basis to meet increasing demand in the market. Anand, Vadodara, Kheda, Ahmedabad, Mehsana, Rajkot, Surat, Valsad and Navsari are the major rose growing districts in Gujarat. Considering the above fact it was thought worthwhile to study the impact of training on the knowledge level of rose growers about rose production technology

OBJECTIVE

To know the impact of training on knowledge level of rose growers about rose production technology

METHODOLOGY

From the Anand district, Anand and Tarapur talukas were purposively selected having higher numbers of rose growers as compared to other talukas. Pieces of training on rose production technology were conducted by KVK, Anand in those talukas for the last eight years. Six villages (Tranol, Rasnol, Kunjarav, Zakhala, Rinza, Nabhoi) were selected purposively from both the talukas. From each village, ten trained rose growers and ten untrained rose growers were selected randomly. Thus, a total of 120 rose growers (60 trained and 60 untrained) were selected for the present study. Data were collected through personal contact with the help of a well-structured interview schedule and collected data were tabulated, analyzed and interpreted in the light of the objective.

RESULTS AND DISCUSSION

Table1: Knowledge of the rose growers about rose production technology

(n=120)

Sr. No.	Package of practices of deshi rose cultivation	Trained (n=60)		Un trained (n=60)	
		Frequency	Per cent	Frequency	Per cent
(A) Knowledge regarding land preparation and planting					
1	Suitable weather condition (Warm/Cool and humid)	60	100.00	60	100.00
2	Suitable soil types (Medium black/Sandy loam)	60	100.00	60	100.00
3	Planting material (Hardwood cutting/air layered graft)	60	100.00	60	100.00
4	Suitable variety for deshi rose cultivation	60	100.00	60	100.00
5	Time of planting (June to September)	58	97.00	54	90.00
6	Ideal peat size (30 cm x 30 cm x 30 cm)	56	93.00	45	75.00
7	Recommended spacing (150 cm x 90 cm /120 cm x 120 cm / 90 cm x 90 cm)	59	98.00	52	87.00
(B) Knowledge regarding fertilizer and irrigation management					
1	Recommended dose of F.Y.M required at the time of planting per peat (8-10 kg)	58	97.00	42	70.00
2	Recommended dose of FYM required every year/ plant (3-4 kg)	54	90.00	40	67.00
3	Proper Time of fertilizers application (June- October- January)	55	92.00	30	50.00
4	Proper methods to apply fertilizer (Ring application per plant)	58	97.00	36	60.00
5	Recommended dose of nitrogen/plant (40-50 g/plant)	52	87.00	25	42.00
6	Form of nitrogenous fertilizer application (Urea or Ammonium sulphate)	60	100.00	58	97.00
7	Quantity of nitrogenous fertilizer application (Urea 87 g/plant or Ammonium sulphate 200 g/plant)	56	93.00	20	33.00
8	Recommended dose of phosphorous/plant (40-50 g/plant)	57	95.00	29	48.00
9	Form of phosphatic fertilizer application (DAP 87 or SSP 250)	60	100.00	50	83.00
10	Quantity of phosphatic fertilizer application (DAP 87 g/plant or SSP 250 g/plant)	54	90.00	22	37.00
11	Recommended dose of potash/plant (25 g/plant)	50	83.00	22	37.00
12	Form of potashic fertilizer application (Murat of Potash)	52	87.00	42	70.00
13	Quantity of potashic fertilizer application (Murat of Potash 42 g/plant)	48	80.00	26	43.00
14	Different types of Biofertilizers (Rhizobium, Azotobactor, Azospirillum, PSB culture,NPK bio consortium)	54	90.00	25	42.00
15	Recommended types of biofertilizers for rose (Azospirillum, PSB culture)	52	87.00	23	38.00

Sr. No.	Package of practices of deshi rose cultivation	Trained (n=60)	Un trained (n=60)		
		Frequency	Per cent	Frequency	Per cent
16	Recommended dose of bio fertilizer (1 m.l Azospirillum +1 m.l. P.S.B in 200 m.l. water)	51	85.00	29	48.00
17	Different methods of biofertilizer application (Through Drip irrigation, Through flood irrigation method, Mixing with FYM and broadcasting in field, Drenching per plant)	58	97.00	45	75.00
18	Recommended method to apply bio fertilizer in rose (Drenching per plant)	46	77.00	25	42.00
19	Irrigation interval in winter (10 to 12 days interval)	58	97.00	56	93.00
20	Irrigation interval in summer (7 to 8 days interval)	58	97.00	52	87.00
21	Method of irrigation	60	100.00	58	97.00
22	Method of weed control (Hand weeding/ Weedicides application)	60	100.00	59	98.00
(C) Knowledge regarding special care operations					
1	Pruning	58	97.00	56	93.00
2	Ideal time for pruning (Second fortnight of October)	52	87.00	32	53.00
3	Recommended pruning height from ground level (45 to 60 cm)	50	83.00	30	50.00
4	Removal of dead and decay branches regularly	52	87.00	32	53.00
5	Use of boarudo paste	49	82.00	29	48.00
6	Quantity of mixture for the preparation of Bourdo paste (1 kg lime + 1 kg Copper sulfate + 1 lit. water)	45	75.00	25	42.00
7	Mulching (Around plant during summer)	45	75.00	25	42.00
(D) Knowledge regarding IPM					
1	Method of <i>Tricoderma viridi</i> or <i>Trichoderma hergianum</i> culture application	36	60.00	16	27.00
2	Symptoms of aphid attack (Suck sap from the young plant parts tips, buds, flowers, leaves)	45	75.00		42.00
3	Symptoms of aphid attack (Suck sap from the young plant parts tips, buds, flowers, leaves) Recommended dose of pesticide for aphid control (Neem based pesticides 20 ml (1 EC) to 40 ml (0.15 EC) per 10 lit. Water OR Dimethoate 30 EC (10ml)/Acephate 75 SP (10g)/ Imidachloprid 17.8 Sl (4ml)/ Thiamethoxam 25 WG (4g) per 10 lit. Water)	40	67.00	20	33.00
4	Symptoms of thrips attack (Made strips on young plant parts tips, buds, flowers, leaves & Suck sap/ Ash brown patches on leaves & buds)	38	63.00	18	30.00
5	The recommended dose of pesticide for thrips control (Neem oil 50 ml or Neem based pesticides 30 ml (0.15 EC) per 10 lit. Water OR Un opened damaged buds pick and burn them)	35	58.00	15	25.00
6	Symptoms of red mite attack (Suck sap from the young leaves & growing plant parts)	29	48.00	19	32.00

Sr. No.	Package of practices of deshi rose cultivation	Trained (n=60)		Un trained (n=60)	
		Frequency	Per cent	Frequency	Per cent
7	Recommended dose of pesticide for red mite control (Neem based pesticides 20 ml (1 EC) to 40 ml (0.15 EC) per 10 lit. Water OR Chorphanpyre 10 EC 20 ml / Ethion 50 EC 10ml/ Propergite 57 EC 10 ml/ Phanazaquine 10 EC 10 ml per 10 lit. Water	25	42.00	15	25.00
8	Symptoms of termite (Suck sap from the roots, stem & damage whole plant become wilt and die)	34	57.00	14	23.00
9	Recommended dose of pesticide for termite control (Chlorpyriphos 10% G @ 1 kg/ha or Chlorpyriphos 20 EC @ 12.50 to 25 ml per 10 lit. Water)	28	47.00	18	30.00
10	Symptoms of mealy bug attack (Stay on young leaves & stems and suck sap continuously, Plant growth disturbed & plant become wilted)	21	35.00	11	18.00
11	Recommended dose of pesticide for mealy bug control (Prophanophos 50 EC 10ml/ Acitamidrid 20 SP 3 g/ Quinalphos 25 EC 20 ml per 10 lit. Water)	58	97.00	38	63.00
12	Mixing detergent or shampoo with pesticide before spraying	54	90.00	34	57.00
(E) Knowledge regarding IDM					
1	Symptoms of wilt (Leaves become yellow & drop / Rose plant immediately wilting)	55	92.00	35	58.00
2	Recommended dose of fungicide for wilt control Carbendazim 50% WP 0.05% (10g/10lit water) OR <i>Trichoderma viridi</i> or <i>Trichoderma hergianum</i>	39	65.00	19	32.00
3	Symptoms of powdery mildew (White fungus growth found on leaves, buds and new branches / Buds does not open and leaves drop)	58	97.00	38	63.00
4	Recommended dose of fungicide for powdery mildew control (Wettable sulphur 80 % WP 0.15% (20 g/10 lit water) OR Hexaconazol 5% EC 0.005% (10 ml/10 lit water)	45	75.00	25	42.00

(A) Knowledge regarding land preparation and planting

From the above Table 1, it can be said that cent percent of the trained and untrained rose growers knew about suitable weather conditions, soil types, variety and planting material for rose cultivation. As far as the knowledge about the time of planting, ideal pit size and recommended spacing for the rose is concern more than 90 percent of the trained farmers knew about it. Whereas in the case of untrained rose growers the 90 percent knew the ideal time of planting, 75 percent knew ideal peat size and 87 percent knew the recommended spacing.

(B) Knowledge regarding fertilizer and irrigation management

Incase of knowledge regarding fertilizer and irrigation

management, cent percent of the trained rose growers knew about form of nitrogenous fertilizer application, form of phosphatic fertilizer application, method of irrigation and method of weed control (Hand weeding/ Weedicides application), 97 percent of them had a knowledge about Recommended dose of F.Y.M required at the time of planting per peat, Proper methods to apply fertilizer (Ring application per plant), Different methods of bio fertilizer application (Through Drip irrigation, Through flood irrigation method, Mixing with FYM and broadcasting in field, Drenching per plant), Irrigation interval in winter (10 to 12 days interval) and Irrigation interval in summer (7 to 8 days interval), 95 percent had a knowledge about Recommended dose of phosphorous/ plant (40-50 g/plant), 93 percent had a knowledge about Quantity of nitrogenous fertilizer application (Urea 87 g/ plant or Ammonium sulphate 200 g/plant), 92 percent of them

had a knowledge about Proper Time of fertilizers application (June- October- January), 90percent of them had a knowledge about Recommended dose of FYM required every year/ plant (3-4 kg), Quantity of phosphatic fertilizer application (DAP 87 g/plant or SSP 250 g/plant), Different types of Biofertilizers (Rhizobium, Azotobactor, Azospirillum, PSB culture,NPK bio consortium), 87 percent of them had a knowledge about Recommended dose of nitrogen/plant (40-50 g/plant), Form of potashic fertilizer application (Murat of Potash), Recommended types of biofertilizers for rose (Azospirillum, PSB culture), 85 percent of them had a knowledge about Recommended dose of bio fertilizer (1 m.l Azospirillum +1 m.l. P.S.B in 200 m.l. water), 83 percent had a knowledge about Recommended dose of potash/plant (25 g/plant), 80 percent of them had a knowledge about Quantity of potassic fertilizer application (Murat of Potash 42 g/plant) and 77 percent of them had a knowledge about Recommended method to apply bio fertilizer in rose (Drenching per plant).

In case of untrained rose growers 98 percent of them had a knowledge about Method of weed control (Hand weeding/ Weedicides application), 97 percent of them had a knowledge about Method of irrigation and percent of them had a knowledge about Form of nitrogenous fertilizer application (Urea or Ammonium sulphate), 93percent of them had a knowledge about Irrigation interval in winter (10 to 12 days interval), 87 percent of them had a knowledge about Irrigation interval in summer (7 to 8 days interval), 83 percent of them had a knowledge about Form of phosphatic fertilizer application (DAP 87 or SSP 250), 75 percent of them had a knowledge about Different methods of bio fertilizer application (Through Drip irrigation,Through flood irrigation method, Mixing with FYM and broadcasting in field, Drenching per plant), 70 percent of them had a knowledge about Form of potashic fertilizer application (Murat of Potash), 70 percent of them had a knowledge about Recommended dose of F.Y.M required at the time of planting per peat (8-10 kg) 67 percent of them had a knowledge about Recommended dose of FYM required every year/ plant (3-4 kg), 60 percent of them had a knowledge about Proper methods to apply fertilizer (Ring application per plant), 50 percent of them had a knowledge about Proper Time of fertilizers application (June- October- January), 48 percent of them had a knowledge about Recommended dose of phosphorous/plant (40-50 g/plant) and Recommended dose of bio fertilizer (1 ml Azospirillum +1 m.l. P.S.B in 200 m.l. water), 43 percent of them had a knowledge about Quantity of potashic fertilizer application (Murat of Potash 42 g/plant), 42 percent of them had a knowledge about Recommended

dose of nitrogen/plant (40-50 g/plant), Different types of Biofertilizers (Rhizobium, Azotobactor, Azospirillum, PSB culture,NPK bio consortium) and Recommended method to apply bio fertilizer in rose (Drenching per plant), 38 percent of them had a knowledge about Recommended types of biofertilizers for rose (Azospirillum, PSB culture), 37 percent of them had a knowledge about Quantity of phosphatic fertilizer application (DAP 87 g/plant or SSP 250 g/plant) and Recommended dose of potash/plant (25 g/plant) and 33 percent of them had a knowledge about Quantity of nitrogenous fertilizer application (Urea 87 g/plant or Ammonium sulphate 200 g/plant).

(C) Knowledge regarding special care operations

In the case of Knowledge regarding special care operations 97 percent of the trained rose growers had a piece of knowledge about Pruning, 87 percent of them knew about the Ideal time for pruning (Second fortnight of October) and Removal of dead and decay branches regularly, 83 percent of them had a piece of knowledge about Recommended pruning height from ground level (45 to 60 cm), 82 percent of them knew Use of boarudo paste, 75 percent of them knew Quantity of mixture for the preparation of Bourdo paste (1 kg lime + 1 kg Copper sulfate + 1 lit. water) and knowledge about Mulching (Around plant during summer).

Whereas in the case of untrained rose growers 93 percent of them knew Pruning, 53 percent each of them had knowledge about the Ideal time for pruning (Second fortnight of October) and Removal of dead and decay branches regularly, 50 percent of them had knowledge about Recommended pruning height from ground level (45 to 60 cm), 48 percent of them knew Use of boarudo paste, 42 percent of them had knowledge about Quantity of mixture for the preparation of Bourdo paste (1 kg lime + 1 kg Copper sulfate + 1 lit. water) and Mulching (Around plant during summer).

(D) Knowledge regarding IPM

In case of Knowledge about IPM 97 percent of the trained rose growers had a knowledge about recommended dose of pesticide for mealy bug control (Prophanophos 50 EC 10ml/ Acitamiprid 20 SP 3 g/ Quinalphos 25 EC 20 ml per 10 lit.Water), 90 percent of them had a knowledge about Mixing detergent or shampoo with pesticide before spraying, 75 percent of them had a knowledge about Symptoms of aphid attack (Suck sap from the young plant parts tips, buds,

flowers, leaves), 67 percent of them had a knowledge about Recommended dose of pesticide for aphid control (Neem based pesticides 20 ml (1 EC) to 40 ml (0.15 EC) per 10 lit. Water OR Dimethoate 30 EC (10ml)/Acephate 75 SP (10g)/Imidachloprid 17.8 SI (4ml)/ Thiamethoxam 25 WG (4g) per 10 lit. Water), 63 percent of them had a knowledge about Symptoms of thrips attack (Made strips on young plant parts tips, buds, flowers, leaves & Suck sap/ Ash brown patches on leaves & buds), 60 percent of them had a knowledge about Method of *Trichoderma viridi* or *Trichoderma hergianum* culture application, 58 percent of them had a knowledge about Recommended dose of pesticide for thrips control (Neem oil 50 ml or Neem based pesticides 30 ml (0.15 EC) per 10 lit. Water OR Un opened damaged buds pick and burn them), 57 percent of them had a knowledge about Symptoms of termite (Suck sap from the roots, stem & damage whole plant become wilt and die), 48 percent of them had a knowledge about Symptoms of red mite attack (Suck sap from the young leaves & growing plant parts), 47 percent of them had a knowledge about Recommended dose of pesticide for termite control (Chlorpyrifos 10% G @ 1 kg/ha or Chlorpyrifos 20 EC @ 12.50 to 25 ml per 10 lit. Water), 42 percent of them had a knowledge about Recommended dose of pesticide for red mite control (Neem based pesticides 20 ml (1 EC) to 40 ml (0.15 EC) per 10 lit. Water OR Chlorphanpyre 10 EC 20 ml / Ethion 50 EC 10ml/ Propargite 57 EC 10 ml/ Phanaquin 10 EC 10 ml per 10 lit. Water) and 35 percent of them knew Symptoms of mealybug attack (Stay on young leaves & stems and suck sap continuously, Plant growth disturbed & plant become wilted)

Whereas in case of untrained rose growers 63 percent of them had a knowledge about Recommended dose of pesticide for mealy bug control (Prophanophos 50 EC 10ml/ Acitamidiprid 20 SP 3 g/ Quinalphos 25 EC 20 ml per 10 lit. Water), 57 percent of them had a knowledge about Mixing detergent or shampoo with pesticide before spraying, 42 percent of them had a knowledge about Symptoms of aphid attack (Suck sap from the young plant parts tips, buds, flowers, leaves), 33 percent of them had a knowledge about Recommended dose of pesticide for aphid control (Neem based pesticides 20 ml (1 EC) to 40 ml (0.15 EC) per 10 lit. Water OR Dimethoate 30 EC (10ml)/Acephate 75 SP (10g)/ Imidachloprid 17.8 SI (4ml)/ Thiamethoxam 25 WG (4g) per 10 lit. Water), 32 percent of them had a knowledge about Symptoms of red mite attack (Suck sap from the young leaves & growing plant parts), 30 percent of them had a knowledge about Symptoms of thrips attack (Made strips on

young plant parts tips, buds, flowers, leaves & Suck sap/ Ash brown patches on leaves & buds) and Recommended dose of pesticide for termite control (Chlorpyrifos 10% G @ 1 kg/ha or Chlorpyrifos 20 EC @ 12.50 to 25 ml per 10 lit. Water), 27 percent of them had a knowledge about Method of *Trichoderma viridi* or *Trichoderma hergianum* culture application, 25 percent of them had a knowledge about Recommended dose of pesticide for thrips control (Neem oil 50 ml or Neem based pesticides 30 ml (0.15 EC) per 10 lit. Water OR Un opened damaged buds pick and burn them) and Recommended dose of pesticide for red mite control (Neem based pesticides 20 ml (1 EC) to 40 ml (0.15 EC) per 10 lit. Water OR Chlorphanpyre 10 EC 20 ml / Ethion 50 EC 10ml/ Propargite 57 EC 10 ml/ Phanaquin 10 EC 10 ml per 10 lit. Water), 23 percent of them had knowledge about Symptoms of termite (Suck sap from the roots, stem & damage whole plant become wilt and die) and 18 percent of them knew Symptoms of mealybug attack (Stay on young leaves & stems and suck sap continuously, Plant growth disturbed & plant become wilted).

(E) Knowledge regarding IDM

In case of knowledge regarding IDM, 97 percent of the trained rose growers knew Symptoms of powdery mildew (White fungus growth found on leaves, buds and new branches / Buds does not open and leaves drop), 92 percent of them knew Symptoms of wilt (Leaves become yellow & drop / Rose plant immediately wilting), 75 percent of them had a knowledge about Recommended dose of fungicide for powdery mildew control (Wettable sulfur 80 % WP 0.15% (20 g/10 lit water) OR Hexaconazol 5% EC 0.005% (10 ml/10 lit water) and 65 percent of them knew Recommended dose of fungicide for wilt control Carbendazim 50% WP 0.05% (10g/10lit water) OR *Trichoderma viridi* or *Trichoderma hergianum*

Whereas in the case of Untrained rose growers 63 percent of them knew Symptoms of powdery mildew (White fungus growth found on leaves, buds and new branches / Buds does not open and leaves drop), 58 percent of them knew Symptoms of wilt (Leaves become yellow & drop / Rose plant immediately wilting), 42 percent of them had a knowledge about Recommended dose of fungicide for powdery mildew control (Wettable sulfur 80 % WP 0.15% (20 g/10 lit water) OR Hexaconazol 5% EC 0.005% (10 ml/10 lit water) and 32 percent of them knew Recommended dose of fungicide for wilt control Carbendazim 50% WP 0.05% (10g/10lit water) OR *Trichoderma viridi* or *Trichoderma hergianum*.

Table 2 : Overall knowledge of the rose growers about deshi rose production technology

(n=120)

Sr. No.	Category of Knowledge	Trained (n=60)		Un trained (n=60)	
		Frequency	Per cent	Frequency	Per cent
1	Very low (up to 20 %)	0	0.00	01	01.67
2	Low (21% to 40%)	04	06.67	17	28.33
3	Medium (41% to 60%)	11	18.33	31	51.66
4	High (61% to 80%)	44	73.33	11	18.34
5	Very high (more than 80%)	01	01.67	0	0.00

Table 2 revealed that the majority (73.33 per cent) of the trained rose growers had a high level of knowledge, followed by 18.33, 6.67 and 1.67 per cent of them had a medium, low and very high level of knowledge, respectively. Whereas, in the case of untrained rose growers slightly more than half (51.66 per cent) had a medium level of knowledge, followed by 28.33, 18.34 and 1.67 per cent had a low, high and very low level of knowledge, respectively.

Table 3 : Impact of training on knowledge of trained and untrained rose growers (n=120)

Knowledge Index	Frequency	Mean score	t-value
Trained	60	65.88	7.87**
Untrained	60	48.67	

Table 3 revealed that the mean score of the knowledge index of trained rose growers was 65.88 and the mean score of the knowledge index of untrained rose growers was 48.67. The "t"-test is performed to compare both mean and t-test found highly significant at 0.05 level of significance. So, there was a great impact of training on increasing the knowledge level of trained rose growers as compared to untrained rose growers.

CONCLUSION

In the conclusion it can be said that the mean knowledge index of the untrained rose growers was found 48.67 and of trained was found 65.88, it clearly indicates the positive impact of the training of rose production technologies. Hence, more and more number of the training in this area needs to be conducted for the remaining rose growers by which they can be acquainted with the latest technological advancement of the Rose crop for earning more profit.

REFERENCES

- Aditya, D.K. (1992). Floriculture in national economy. Proceedings of the 6th National Horticultural Conference and Symposium. BSHS, Page 30-35.
- Dubey A.K., Srivastava J.P., Sing R.P. and Sharma V.K.(2008). Impact of KVK programme on socio economic status and knowledge of trainees in Allhabad district. *Indian Res. J.Ext.Edu.*,8(2&3).
- Sharma P., Sing G.P. and Jha S. K. (2013). Impact of training programme on Knowledge and adoption level of preservation technologies among farm women : a comparative study. *Indian Res. J.Ext.Edu.*,13(1):96-100.

Received : September 2021 : Accepted : November 2021