Annals of Agric. Sci., Moshtohor **ISSN 1110-0419**
Vol. 50(4) (2012), 427– 434 **http://annagricmoshj.com**

Effect of side shoots pruning method on growth, yield and quality of eggplants (*Solanum melongena* L.) grown under unheated plastic greenhouse conditions.

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Abstract.

Studies were conducted under greenhouse conditions to find the relations between pruning methods and chosen parameters of vegetative aubergine development. Two field experiments were carried out during the two successive winter seasons of 2009/2010 and 2010/2011 at the Agriculture Experimental Station Faculty of Agriculture – Cairo university at Giza to study the effect of pruning method on growth, fruit yield and quality of cvs ' Fabinia ', 'Roma ' and ' Snow ' of eggplants (Solanum melongena L.) grown in the greenhouse. The following pruning systems were applied: plants were either left unpruned as a control ,pruned at the every node fruit set, pruning to every node one fruit set and pruning to every node two fruit set to study the response of three eggplants cultivars. A split plot design with three replication was used where the three eggplants cultivars were located in the man plot, while three pruning systems were randomly applied in the sub plots. The highest records of plant height and number of leaves as well as early and total produced yield/ fed., were obtained by the combined effect of cv. ' Snow ' eggplant and pruned at the every node two fruit set followed by cv. ' Snow ' and pruned at the every node one fruit set. On the other hand, the lower values of plant height and number of leaves as well as early and total produced yield/ fed., were obtained by the combined effect of cv. ' Fabinia ' without pruned in both seasons.

The highest values of physical characteristics i.e. Fruit length, diameter and weight and chemical characteristics i.e. TSS were obtained by the combined effect of cv. ' Snow ' eggplants and pruned at the every node two fruit set followed by cv.' Snow ' and pruned at the every node one fruit set in both seasons.

Finally it could be concluded that the combined effect of cv. ' Snow ' eggplants and pruned at the every node two fruit set was recommended for higher yield with good quality of eggplant.

Key words: Eggplants (Solanum melongena L.) cvs Fabinia, Roma and Snow; pruning systems; vegetative growth; yield.

Introduction

Eggplant (Solanum melongena L.) is an important non-climacteric fruit, with a worldwide production of around 32 million tonnes (FAO STAT, 2009). Quality attributes include: white, green, violet or variegated bright surface without defects, dark green calyx and absence of seed or pulp browning (Cantwell and Suslow, 2009). Hybrid eggplant cultivation in glasshouse, shoot, leaf, and flower pruning are suggested to increase yield and improve its quality (Pessarakli and Dris, 2003). Obtaining cultivars with lower environmental requirements, as well as the accessibility of the seeds of these cultivars contributed to the increased interest in growing eggplant in our country, as well as in initiating agro technical studies on this vegetable in a few scientific centers. So far these studies have focused on the usefulness of the cultivars' usability for growing in glasshouses and foil tunnels [Wierzbicka et al. 1990, Gajewski and Gajc-Wolska 1998, Cebula and Ambroszczyk 1999, Buczkowska 2005], learning about the biology of eggplant flowering, with indication to the fruit-setting intensifying procedures [Glaps and Górecki 1989, Kowalska 2003 and 2008, Sakara and Bieniasz 2008]. Pruning is essential for the improvement of light conditions in the plant profile (Cebula et al., 1998). Proper pruning system balances the vegetative and generative plant development with optimizing the course of fruiting, the earliness, and fruit quality. Paksoy and Akilli (1994) determined the most suitable pruning method for eggplants grown in glasshouses. They stated no significant differences between the pruning types (pruned to two or three primary shoots, and unpruned) in respect of total fruit yield, but pruning improved the fruit quality. Cebula (1996) and Cebula and Ambroszczyk (2000) recommended the technique of eggplant pruning to one, two or three shoots together with leaves and it fruit sets cutting. Cited authors pointed that an important effect of eggplant pruning was the improved quality of its evaluated on the basis of their mean weight and external dimensions. Plants with one fruit set and one leaf in every node gave the greatest yield. Fruit sets cutting improved the quality of the remaining fruits and uniformity of yield.

The results of GuoDong et al. (2004) indicated that the photosynthetic rate was higher and dry matter was distri- buted evenly at different canopy levels with double-stem training of eggplant in a greenhouse. Vigorous root growth was also observed

with this treatment. All these resulted in a higher yield, Cebula (2003) trained eggplant cv. `Liona F1' to one main shoot, with modification of the number of leaves and fruit sets on side shoots. The limitation of the fruiting area led to a significant decrease in the yield and the improvement of the fruit quality. The effect of pruning on the vegetative development of eggplant `Tapia F1' cultivated in glasshouses was described by Ambroszczyk et al. (2007). In eggplant growing in unheated tunnels less intense pruning is recommended. Managing eggplants for three or four guiding shoots is to be considered optimal, which was also started by other authors (Paksoy and Akilli, 1994, Pessavakli and Dris, 2003). As well as Michalojc and Buczkowska (2008, 2009).

The aim of the present work was to find the effect of different pruning systems on growth, fruit yield and quality of cvs Fabinia ,Roma and Snow of eggplant (Solanum melongena L.) grown in the unheated plastic greenhouse.

Material and Methods

Field experiments were carried out in unheated plastic greenhouses (9 X 40 m , 3.2 height) at the Agriculture Experimental Station, Faculty of Agriculture, Cairo University ,Giza, A.R.E, during the two successive winter seasons of 2009-2010 and 2010-2011, to study the effect of pruning method on growth, fruit yield and quality of cvs Fabinia , Roma, and Snowof eggplant (Solanum melongena L.) grown in the plastic greenhouses. Seeds of eggplant were sown in the nursery in Styrofoam trays filled with a mixture of peat moss and vermiculite (1:1 volume) on 4 ,6 September in both seasons, seedling of 35 days old were transplanted in the greenhouse (360m2) on ridges 1 m wide and spacing of 50 cm between rows and 50 cm between plants. The following pruning systems were applied: plants were either left unpruned as control pruned at the every node fruit set; pruning to every node one fruit set and pruning to every node two fruit set to study the response of three eggplants cultivars. The plants were pruned leading to one shoot. Other agricultural practices required for eggplant production were done as commonly followed in the district.

Treatments were as follows:

Eggplant cultivars:

The experiment included 3 eggplant cultivars.

Large, black-fruited varieties (Fabinia).

Large, black-fruited varieties (Roma).

Large, white-fruited varieties (Snow).

Pruning systems:

In this experimental unit fruit sets were left on each node: one on the main shoot and the other on the side shoot. The side shoots were pruned:

1-Pruned at the every node fruit set (control).

2-Pruned at the every node one fruit set.

3-Pruned at the every node two fruit set.

A split plot design with three replication was used where the three eggplants cultivars were located in the man plot, while three pruning systems were randomly applied in the sub plots.

Data recorded:

Vegetative Growth: a random sample of five plants from each experimental plot were chosen at 90 days (at harvest) after transplanting in the two seasons and the following measurements were recorded:

1-Plant height:

The height of plants was measured from the soil surface up to the tip of the height leaf.

2- Number of leaves/plant.

2- Yield and its Attributes: at harvest stage the mature fruits of eggplant for each experimental plot were collected along the harvest season and the following data were recorded:

1-Early yield: (the collection of the first two harvests).

2-Total yield

3-Fruit characteristics: Five fruits from each treatment were taken randomly for determining average fruit characters as follows.

A-Fruit length.

B-Fruit diameter.

C-Fruit weight.

4-Chemical constituents:

Total chlorophyll: it content in leaves (using SPAD apparatus)

The total soluble solids (TSS) of fruits: it was obtained by using the hand refract meter, according to the method described by A.O.A.C (1980).

The data collected on different parameters under the experiment were statistically analyzed to obtain the level of significance using MSTAT-C computer programmer developed by Russel (1986). The treatments means were compared by L.S.D at 5%level.

Results and Discussion

Data on the effect of eggplant cultivars, different pruning systems and their interaction on plant height, early yield and total yield and fruits characteristics of eggplant plants were presented in Tables 1 and 2.

Plant height :

Such data in Table1, indicate that cv. ' Snow 'eggplant recorded the highest and significant increases in plant height in both seasons compared to the cv. 'Fabinia ' and cv. 'Roma ' eggplants. In this respect, plant height was not significantly increased by all pruning systems applied compared with the unpruned (control) in both seasons. In this regard, the highest values of plant height were recorded in case of pruning at the every node two fruit set.

As for the effect of the interaction, the same data in (Tables, 1 and2 reveal that the interaction between eggplant cultivars and pruning systems significantly increased plant height. The tallest significant eggplant plants were obtained by the combined effect of cv. ' Snow 'eggplant and pruned at the every node two fruit set followed by cv. ' Snow ' and pruned at the every node one fruit set. On the other hand, the lower values of plant height were obtained by the combined effect of cv. 'Fabinia ' without pruned. Cantwell and Suslow(2009).Indicated that shoot, leaf, and flower pruning are suggested to increase yield and improve its quality in case of cultivation of eggplant hybrid in greenhouse.

Number of leaves:

The number of leaves in different varieties of eggplant was presented in (Table 1,)it showed the gradual increase in leaf emergence as that cv. ' Snow 'eggplant showed that the highest and significant increases in number of leaf compared to the cv. 'Fabinia ' and cv. 'Roma ' eggplants in both seasons. Concerning the effect of pruning systems, such data indicate that the increases in number of leaf were obtained by pruning at the every node two fruit set. The highest of number of leaf of the other treatments ranged between those pruned at the every node one fruit set and the unpruned (control) in both seasons.

Regarding the interaction effect between eggplant cultivars and pruning systems, it is obvious that there were significant increase in number of leaf per plant. The highest number of leaf per plant was obtained by combined effect of cv.' Snow ' cv. eggplants and pruned at the every node two fruit set. In addition, the lowest early yield per plant was obtained by cv.' Fabinia ' without pruned.

A general sigmoid growth pattern in leaves number growth was observed for eggplant which was also supported by Sarker (2009) and Mustari (2010).

Table 1. Effect of eggplants cultivars, pruning systems and their interactions on plant height and number of leaves for eggplant plants in 2009-2010and2010-2011 season.

Treatments		2009-2010		2010-2011	
		Plant height (cm)	Number of leaves/ Plant	Plant height (cm)	Number of leaves/ Plant
Cultivars(cv.)					
Roma		82.46	35.3	66.43	34.1
Fabinia		85.97	38.9	68.90	36.6
Snow		88.35	46.7	71.14	43.7
LSD at(0.05)(cv.)		0.29	2.6	0.24	2.9
Pruning systems(pr.)					
Every node fruit set		84.38	40.0	68.18	37.7
Every node one fruit set		86.04	40.1	68.94	38.0
Every node two fruit set		86.36	40.7	69.35	38.7
LSD at(0.05)(pr.)		n.s	0.5	n.s	0.4
Pruning systems(pr.) x Cultivars(cv.)					
Roma	Every node fruit set	81.35	35.0	66.17	33.7
	Every node one fruit set	82.94	34.4	65.54	33.9
	Every node two fruit set	83.08	36.4	67.57	34.7
Fabinia	Every node fruit set	84.85	39.2	68.16	36.4
	Every node one fruit set	86.33	38.4	69.58	36.6
	Every node two fruit set	86.74	39.1	69.96	36.7
Snow	Every node fruit set	86.95	45.9	70.21	43.1
	Every node one fruit set	88.85	47.5	71.51	43.4
	Every node two fruit set	89.25	46.6	71.69	44.7
LSD at(0.05) (pr.) x (cv.)		1.49	1.6	1.29	0.7

2.1- Early yield:

Data in Tables 3 and 4, show clearly that cv. ' Snow 'eggplant caused statistical increases in the early yield compared with the cv.' Fabinia ' and cv. 'Roma ' eggplants. These results were similar in the two seasons. In this regard, Wierzbicka et al. 1990, Gajewski and Gajc-Wolska 1998, Cebula and Ambroszczyk 1999, Buczkowska 2005, reported similar results on studied vegetable crops.

Concerning the effect of pruning systems, such data indicate that the highest early yield was obtained by pruning at the every node two fruit set. The highest of early yield of the other treatments ranged between those pruned at the every node one fruit set and the unpruned (control) in both seasons. Cebula 1996, and Cebula and Ambroszczyk 2000, found that yield in eggplant plants was significantly increased by all pruning systems were applied compared with the unpruned (control) in both seasons.

Regarding the interaction effect between eggplant cultivars and pruning systems, it is obvious that early yield per plant was significantly increased; as a result of the interaction the highest early yield per plants was obtained by combined effect of cv. 'Snow '

eggplant and pruning at the every node two fruit set. In addition, the lowest early yield per plant was obtained by cv. 'Fabinia ' without pruned.Cantwell and Suslow (2009). Reported similar results on studied of eggplant crop.

2.2- Total yield:

The effect of different studied treatments on total fruit yield was presented in Tables 2, such data indicate that the highest yield was obtained with cv. ' Snow 'eggplant On the contrarily, the lowest value was obtained with cv.' Fabinia ' These results are nearly similar in the two seasons. In this regard Wierzbicka et al. 1990, Gajewski and Gajc-Wolska 1998, Cebula and Ambroszczyk 1999, Buczkowska 2005, reported similar results on studied vegetable crops.

The highest yield was obtained by pruning at the every node two fruit set. Values of yield of the other treatments ranged between those pruned at the every node one fruit set and the unpruned (control). Cebula 1996, and Cebula and Ambroszczyk (2000).Found that yield in eggplant plants was significantly increased by all pruning systems applied compared with the unpruned (control) in both seasons. Cantwell and Suslow, (2009). Reported that hybrid eggplant cultivation in glasshouse, shoot, leaf, and flower pruning are suggested to increase yield and improve its quality.

Data also showed that the interaction between the cv. ' Snow 'eggplant and pruned at the every node two fruit set gave the highest yield compared with cv. 'Fabinia ' without pruned in both seasons.

These results are in conformity with those reported by Wierzbicka et al. (1990), Buczkowska (2005) and Cantwell and Suslow(2009). Reported similar results on studied eggplant crop.

Table 2. Effect of eggplants cultivars, pruning systems and their interactions on early yield and Total yield for eggplant plants in 2009-2010and2010-2011 season.

Treatments		2009-2010		2010-2011	
		Early yield (kg /m2)	Total yield (kg /m2)	Early yield (kg /m2)	Total yield (kg /m2)
Cultivars(cv.)					
Roma		0.297	2.700	0.243	2.018
Fabinia		0.373	2.200	0.318	1.656
Snow		0.427	3.640	0.371	2.640
LSD at(0.05)(cv.)		0.041	0.176	0.041	0.211
Pruning systems(pr.)					
Every node fruit set		0.268	2.110	.0234	2.018
Every node one fruit set		0.340	2.340	0.308	1.656
Every node two fruit set		0.488	2.670	0.391	2.640
LSD at(0.05)(pr.)		0.032	0.156	0.031	0.202
Pruning systems(pr.) x Cultivars(cv.)					
Roma	Every node fruit set	0.223	2.670	0.173	2.018
	Every node one fruit set	0.263	2.340	0.218	1.656
	Every node two fruit set	0.403	2.640	0.338	2.640
Fabinia	Every node fruit set	0.248	2.018	0.235	2.018
	Every node one fruit set	0.360	1.656	0.320	1.656
	Every node two fruit set	0.510	2.640	0.400	2.640
Snow	Every node fruit set	0.333	2.018	0.295	2.018
	Every node one fruit set	0.397	1.656	0.385	1.656
	Every node two fruit set	0.550	2.640	0.433	2.640
LSD at(0.05) (pr.) x (cv.)		0.056	0.270	0.043	0.351

2.3- Fruits Characteristics:

The results of the main effect of eggplant cultivars, different pruning systems and their interaction on fruits characteristics i.e. fruit length, fruit diameter, fruit weight, and TSS during both seasons of study are recorded in Table 3, in this respect, cv. ' Snow 'eggplant significantly increased all the studied fruits characteristics compared with' Fabinia ' cv. in both growing seasons. The highest values of physical characteristics i.e. fruit length, diameter and weight were obtained by cv.Snow ' cv. when compared to the cv. ' Fabinia ' and cv. 'Roma ' eggplant. These results were true in both seasons and were in harmony with those reported by Wierzbicka et al. 1990, Gajewski and Gajc-Wolska 1998, Cebula and Ambroszczyk 1999, Buczkowska 2005.

Concerning the effect of pruning systems, the obtained data show that application of pruning at the every node two fruit set to the eggplant plants, gave higher values of measured physical fruit parameters compared with the unpruned (control). (Wierzbicka et al. 1990, Buczkowska 2005 and Cantwell and Suslow, 2009).

Data also show that the interaction between the cv. ' Snow 'eggplant and pruning at the every node two fruit set gave higher values of measured physical fruit parameters compared with cv. ' Fabinia ' without pruning in both seasons (Cebula 1996, and Cebula and Ambroszczyk 2000).

Table 3. Effect of eggplants cultivars, pruning systems and their interactions on physical characteristics of eggplant fruits 2009-2010and2010-2011 season.

Treatments		2009-2010			2010-2011		
		Fruit length (cm)	Fruit diameter (cm)	Fruit weight (g)	Fruit length (cm)	Fruit diameter (cm)	Fruit weight (g)
Cultivars(cv.)							
Roma		12.7	3.18	80.43	13.68	3.42	80.83
Fabinia		14.0	3.38	84.60	14.26	3.68	86.20
Snow		15.6	3.94	88.60	15.39	4.16	88.90
LSD at(0.05)(cv.)		0.3	0.18	2.21	0.91	0.21	1.14
Pruning systems(pr.)							
Every node fruit set		10.7	2.44	75.63	11.33	2.78	76.94
Every node one fruit set		13.8	3.22	84.83	14.44	3.47	85.08
Every node two fruit set		14.1	3.38	85.33	14.63	3.61	85.31
LSD at(0.05) (pr.)		0.3	0.15	2.03	0.61	0.16	1.08
Pruning systems(pr.) x Cultivars(cv.)							
Roma	Every node fruit set	9.0	2.20	70.00	10.20	2.54	71.60
	Every node one fruit set	10.5	2.29	75.20	11.30	2.63	78.20
	Every node two fruit set	12.0	2.75	79.30	12.30	2.95	79.00
Fabinia	Every node fruit set	12.2	2.80	79.90	13.70	3.00	80.11
	Every node one fruit set	14.0	3.10	83.30	14.33	3.50	85.30
	Every node two fruit set	14.9	3.59	88.90	15.20	3.78	87.90
Snow	Every node fruit set	12.7	2.95	80.20	13.93	3.21	80.23
	Every node one fruit set	14.1	3.20	84.00	14.20	3.33	86.00
	Every node two fruit set	15.2	3.90	89.20	15.56	4.00	88.50
LSD at(0.05) (pr.) x (cv.)		0.4	0.25	3.35	1.1	0.28	2.35

3-Chemical constituents:

3.1- Chlorophyll content:

Data in Table 4 show the effect of eggplant cultivars and pruning systems as well as their interaction on chlorophyll content of leaves of eggplant plants during the winter seasons of 2009/2010 and 2010/2011

In this regard, such data reveal that there were no significant differences eggplant cultivars in such pigments in the tissues of leaves. In this respect, the highest value was obtained from cv. ' Snow 'eggplant.

It is obvious also from data in Table 4 that chemical analysis for photosynthetic pigments in leaves of eggplant, i.e., chlorophyll was not significantly increased with different pruning systems, i.e., pruning at the every node two fruit set and pruning at the every node one fruit set.

On the other hand, the interaction effect between eggplant cultivars and pruning systems, it is obvious that significant increases in chlorophyll in the two seasons were obtained by the combined effect of cv. ' Snow 'eggplant and pruning at the every node two fruit set followed by cv.' Snow ' and pruning at the every node one fruit set on leaves chlorophyll content in both seasons.

These results are agree with data obtained by Paksoy and Akilli 1994, Pessavakli and Dris 2003, as well as Michalojc and Buczkowska 2008, 2009.

3.2- TSS content:

Data in Table 4 show the effect of eggplant cultivars and pruning systems as well as their interaction on TSS content of eggplant fruits during the winter seasons of 2009/2010 and 2010/2011. In this respect, cv. ' Snow 'eggplant significantly increased all the studied fruits characteristics compared with cv. ' Fabinia ' in both growing seasons. The highest values of chemical characteristics i.e. TSS was obtained by cv. Snow ' when compared to the cv. ' Fabinia ' and cv. 'Roma 'eggplant. These results were true in both seasons and were in harmony with those reported by Wierzbicka et al. 1990, Gajewski and Gajc-Wolska 1998, Cebula and Ambroszczyk 1999, Buczkowska 2005.

Concerning the effect of pruning systems, the obtained data show that application of pruning at the every node two fruit set to the eggplant plants, gave higher values of measured TSS compared with the unpruned (control). Wierzbicka et al. 1990, Buczkowska 2005 and Cantwell and Suslow, 2009.

Data also show that the interaction between cv. ' Snow 'eggplant and pruning at the every node two fruit set gave higher values of measured TSS content of fruit compared with ' Fabinia ' cv. without pruning in both seasons (Cebula 1996, and Cebula and Ambroszczyk 2000).

Table 4. Effect of eggplants cultivars, pruning systems and their interactions on chemical characteristics of eggplant plant and fruits 2009-2010and2010-2011 season.

Treatments		2009-2010		2010-2011	
		Chlorophyll (Spad)	TSS%	Chlorophyll (Spad)	TSS%
Cultivars(cv.)					
Roma		52.05	5.5	49.95	5.1
Fabinia		54.41	6.0	51.77	5.6
Snow		55.43	6.2	53.92	5.7
LSD at(0.05)(cv.)		n.s	0.4	n.s	0.3
Pruning systems(pr.)					
Every node fruit set		53.84	5.8	51.57	5.6
Every node one fruit set		54.06	5.9	51.97	5.8
Every node two fruit set		54.45	6.1	52.11	5.9
LSD at(0.05)(pr.)		n.s	0.2	n.s	0. 1
Pruning systems(pr.) x Cultivars(cv.)					
Roma	Every node fruit set	51.89	5.4	49.65	5.4
	Every node one fruit set	52.08	5.5	49.85	5.5
	Every node two fruit set	52.20	5.6	50.39	5.6
Fabinia	Every node fruit set	54.23	5.8	51.32	5.7
	Every node one fruit set	54.43	6.1	51.81	5.8
	Every node two fruit set	54.57	6.1	52.19	5.9
Snow	Every node fruit set	55.38	6.2	53.70	6.1
	Every node one fruit set	55.40	6.3	53.74	6.2
	Every node two fruit set	55.52	6.3	54.30	6.2
LSD at(0.05) (pr.) x (cv.)		1.742	0.7	1.5	0.6

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تاثير أستخدام طرق التقليم المختلفة على نمو ومحصول وجودة ثمار الباذنجان (*Solanum melongena L.*) المنزرعة تحت ظروف الصوب البلاستيكية الغير مدفاءة

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أجريت الدراسة تحت ظروف الصوب البلاستيكية الغير مدفاءة للوصول لافضل الطرق المستخدمة فى تقليم للنموالخضرى والثمرى لعدة اصناف من الباذنجان, وذلك خلال الموسمين الشتويين لعامى 2010/2009 و 2010/ 2011 داخل محطة التجارب الزراعية التابعة لكلية الزراعة – جامعة القاهرة- محافظة الجيزة واشتملت الدراسة على ثلاثة اصناف من الباذنجان Fabinia , Roma , Snow وتمت زراعتهم داخل الصوب البلاستكية الغير مدفاءة واجريت عليهم طرق مختلفة من التقليم وهى ترك ثمرة واحدة فى كل عقدة و ترك ثمر تين فى كل عقدة و ترك الثمار فى كل عقدة بدون تقليم (مقارنة) وذلك لدراسة مدى استجابة تلك الاصناف لطرق التقليم التبعة ومدى تاثيرها على نمو وانتاجية وجودة ثمار الباذنجان , وتم استخدام التصميم الاحصائى للقطع المنشقة مرة واحدة حيث تم وضع أصناف الباذنجان فى القطع الرئيسية وزعت طرق التقليم المختلفة فى القطع الفرعية بطريقة عشوائية.
تم الحصول على العديد من النتائج الجيدة تتمثل فى ارتفاع النبات زيادة عدد الاوراق وكمية المحصول المبكر والكلى/ م2وذلك للصنف Snow باشتخدام طريقة التقليم (ترك ثمرتان - ترك ثمرة واحدة فى كل عقدة) ومن ناحية اخرى انخفضت قيم ارتفاع النبات عدد الاوراق وكمية المحصول المبكر والكلى/ م2وذلك للصنف Fabinia مع ترك الثمار فى كل عقدة بدون تقليم (مقارنة) وكذلك تم الحصول على أعلى القيم من الخصائص الفيزيقاية المتمثل فى (طول , قطر , وزن الثمرة) و الخصائص الكيميائية المتمثل فى (كمية الكلوروفيل فى الاوراق ,محتوى الثمرة من TSS) للصنف Snow باشتخدام طريقة التقليم (ترك ثمرتان يليها ترك ثمرة واحدة فى كل عقدة) فى كلا الموسمين وبالتالى يمكن الاشارة الى ان التااثير المشترك لصنف Snow و طريقة التقليم (ترك ثمرتان فى كل عقدة)أدى الى زيادة النمو الخضرى والمحصول المبكر والكلى وجودة الثمار المنتجة من اصناف الباذنجان .