REFERENCES

Abdel-Aal, R.S. ; I.Abdel-Aziz ; M. A. El-Sherbeny and M. H. Mahmoud (1981).
A study on the response of Egyptian clover to gibberellic acid (GA_3) application.
Zagazig Univ., Fac. Agric. Res. Bull. No. 387.

Abdel-Aziz , I. M.; Mahmoud, M. H. and A.S. Lonb, M.A. (1985).
Interaction effects of indole acetic acid (IAA) and salimity on the germination and growth of siybean seddlings. Annals Agric., Sci. Fac. Agric., Ain Shams Univ., Cairo, Egypt , 30, (2), 1093-1106.

Abd-el-Fattah, M. A. (1997)
Effect of phosphorus, boron, GA_3 and their interaction on growth , flowering , pood seting , abscission and both green pod and seed yields of broad bean (***Vicia faba L.***) plants.
Alex. J. Agric. Res.; 42 (3) : 311-332.

Abdel-Ghaffar , B. A ; M. N. El-Shourbagy and R. A. El-Naggar (1996).
Effect of IAA and GA_3 on flax (***Linum usitatissimum L.***) seed yield and their metabolic constituents.
Egypt J. Botany ; 35 (1) : 1-9.

Abdel-Latif , E. A.; A. A. Sayed and A. F. Mohamed (1984).
The mineral content of barley plants grown on calcareous soil as affected by the different methods of GA_3 and micronutrients application .
Agric. Res. Rev.; 62 (4B) : 349-358 .

Abdulgalil , A. A. ; A. A. H. El-Khawaga ; E. M. A. Thabet and S. El-S. Sobieh (1995)
Response of solid and intercropped sesame and peanut to gibberellic acid treatment .
Zagazig J. Agric. Res., 22 (3) : 587-600.

Ahmed, M. K. (1995)
Effect of gibberellic acid, cycocel and Alar-85 on morphology and yield of common vetch *(Vicia Sativa L.)*
Egypt. J. Appl. Sci.; 10 (11) : 133-149 .

Aloni, R. and M. H. Zimmermann (1983)
The control of vesel size and density along the plant axis - a new hypothesis . Differentiation ; 24 : 203-208
C.F. Physiol. Plant. (1991) ; 81 : 234-238.

A. O. A. C. (1975)
Official Methods of Analysis of the Association of Analytical Chemists.
12 Ed. Washington .

Arora , A. and D. Banerll (1980)
Significance of bound auxin in developing seeds and pods of certain legumes.
Proc. of the Indian National Sci. Acad. B.; 46 (3) : 356-360.
C.F. Faba Bean Abst.; 3 (1) 68 .

Artamonov, V.L. (1966).
On the synthesis and decomposition of chlorophyll in plants under the influence of gibberellin and vitamin B_{12}.
Sov. Plant. Physiol. USSR; 13:379.

Ashour , N. I. and A. T. Thalooth (1979)
Effect of foliar application with micro-elements and gibberellic acid on photosynthetic pigements and nitrogen contents in leaves of hourse bean plant.
Egypt J. Physiol Sci.; 1 (1) : 39-45.

Audus, L.J. (1972).
Plant Growth Substances.
Vol. 1, Chemistry and Physiology, Leonard Hill, London.

Bagde , T. R.; S. S. Ladole and A. D. Matte (1993)
Effect of different growth regulators on growth , yield and seed production of fenugreek (***Trigonella foenum graecum L.***)
J. Soils and Crops ; 3 (2) : 118-120.

Bazanova, T. B. (1979)
Effect of cycloaliphatic compounds on growth of separate organs and the photosynthetic productivity of cotton.
Izestiya Akademii Nauk Turkemenskai SSR, Biologicheskikh Nauk ; 2 : 45-49.
C.F. Plant Growth Regulator Abst., 8 (2) : 206.

Bedour, H. A. L.; M. S. Aly and F. A. H. Nagwan (1995)
Effect of foliar application of GA and Zn on ***Ocimum basilicum L.*** grown in different soil types.
Egypt J. Physiological Sci.; 18 (2) : 365-380 .

Bhagat , D. V.; H. S. Yadava and J.P. Dixit. (1995)
Effect of nutrients and growth regulator on yield and quelity attributes of black gram.
J. Soils and Crops ; 5 (1) : 18-21.

Bharud, R.W.; B.P. Deore and V.A. Patil (1988)
Effects of growth substances on the growth and yield of methi.
Journal of the Maharashtra Agricultural Universities; 13 (3) : 340-341.

Bidwell (1979)
Plant Physiology. (2nd Ed.)
McMillan Publishing Co. Inc. New York.

Broughton, W.; E.O. Helmuth and D. Yeung (1970)
Role of glucose in development of gibberellin response in peas.
Biochem. Biophys. Acta; 222 : 491-500.

Burkhard, J. (1984)
Influence of plant density, gibberellic acid and site on the yield and yield composition of different faba beam growing types (***Vicia faba L.***) Dissertation Abstracts International, C (European Abstracts); 45 (4) : 991-992.
C.F. Faba Bean Abst.; 6 (1) : 51.

Castro, P.R.C.; B. Appezzato; C.W.W.R. Lara; A. Pelissari; M. Pereira ; M.J.A. Medina; A.C. Bolonhezi and J.A.G Silveira (1990).
Effect of growth regulators on development, nutritional aspects, anatomy and yield of beans (***Phaseolus vulgaris*** cv. Carioca).
Anais da Escola Superior de Agriculture "Luiz de Queiro" ; 47 (1) : 11-28.

Castro, P. R. C. and N. A. Vello (1983)
Action of growth regulators on flowering and productivity in soybean cultiver Davis.
Soybean Abst.; 6 (12) : 2425 .

Cathey , H. M. (1964)
Physiology of growth retarding chemicals.
Ann. Rev. Plant Physiol.; 15 : 271-302.

Chapman H. D. and P. F. Pratt (1961)
Methods of Analysis for Soils, Plants and Waters.
Univ. of Calif. Div. of Agric. Sci.

Cheikh, N. and M. Brenner (1990)
Role of gibberellins in the regulation of carbon metabolism in soybean leaves.
Proceedings of the Plant Growth Regulator Society of America. 17th Annual Meeting, St. Paul, Minnesota, U.S.A. 5-9 August 1990 .
---------- ; M.L. Brenner; J.L. Huber and S.C. Huber (1992)
Regulation of sucrose phosphate synthase by gibberellins in soybean and spinach plants.
Plant Physiol.; 100 (3) : 1238-1242.

Chen, W.S.; H.Y. Liu; Z.H. Liu; Yand and W.H. Chen (1994).
Gibberellin and temperature influence carbohydrate content and flowering in Phalaenopis.
Physiol. Plant.; 90 : 391-395.

Cipollini , D.F.Jr. (1997)
Gibberellic acid treatment reduces the tolerance of field grown common bean to leaf removal.
J. Plant Growth Regulation, 16 (3) : 123-127.

Clifford , P.E.; B.S. Pentland and A.D. Baylis (1992)
Effects of growth regulators on reproductive abscission in faba bean (***Vicia faba*** c.v. Troy)
J. Agric. Sci. Cambridge; 119 : 71-78 .

Clua, A.A.; D.O. Gimenez and L.U. Feruandez (1997).
Increase in forage yield in narrow leaf birdsfoot trefoil (***Lotus tenuis*** Waldst and Kit ex Wild) in permanent pasture with foliar applied gibberellic acid (GA_3) and phosphorus.
Plant Growth Regulation ; 21 (3) : 223-228 .

Cosgrove, D.J. (1989).
Characterization of long-term extension of isolated cell walls from growing cucumber hypocotyls.
Planta; 177:121-130.

Dangar, T.K and P.S. Basu (1992)
Phenol metabolism in relation to IAA content, nodulation and nitrogen fixation in root nodules of leguminous trees.
Indian J. Plant Physiol.; 35 (2) : 114-124.

Darra, B. L. and S. N. Saxena (1973)
Role of IAA on the mineral composition of maize (***Zea mays***) crop under various osmotic stressed conditions.
Plant and Soil ; 38 : 657-661.

Dathe , W.; S.A.C. Lara; R.L. Gutierrez; M.A.C. Rodriguez and G. Sembdner (1991)
Composition for increasing the yield of soybeans.
U.S. Patent. US 5,055,126. Issued Oct. 8, 1991.
Applied Cuba Oct. 11, 1982. Assigned to Akademie der Wissenschaften der DDR, Berlin, Germany ; Akademie der Wissenschaten Kubas, Institut fuer Grundlagen der Tropischen Land wirtschaft "Alexander von Humboldt ", Havana, Cuba.

Delaguardia, M. D. and M. Benlloch (1980)
Effect of potassium and GA_3 on stem growth of whole sunflower plants.
Physiol. Plant.; 49 : 443-448 .

Deore, B.P. and R.W. Bharud (1990).
Growth , yield and storability of fenugreek as influenced by foliar spray of growth substances.
J. Maharashtra Agric. Univ.; 15 (2) : 208-210.

Dhaliwal, J. S. and D. S. Bains (1983)
Interstugation into the seed-seeting in lucerne (M.S.L.) .1. Effect of time of the last cuttings , growth regulators and foliar spray of phosphorus . Journal of Research, Panjab Agricultural Univ. (1083). 20 (3) : 241-250.

Dhasmana, R. and A.K. Agrawal (1991)
Effect of foliar spray of GA, IAA and 2,4-D on production dynamics of clover grass (***Trifolium alexandrinum L.***).
Research and Development Reporter; 8 (1) : 39-46.

Diethelm, R.; E.R. Keller and F. Bangerth (1988)
Interaction between the application of growth regulators, yield components and content of phytohormones in the fruits of ***Vicia faba*** Field Crops Abst.; 41 , 7939 .

Edwards, K.L. and T.K. Scott (1977).
Rapid-growth response of corn root segments : Effect of auxin on elongation.
Planta; 135 : 1-5.

Eid, M.K. and I.M. Iman (1995)
Physiological studies on ***Nigella sativa L.***
1. Effect of different gibberellic acid concentrations on plant growth, seed production and oil content.
Egypt. J. Appl. Sci.; 10(6):12-18.

Einhellig, F. A. (1995)
Mechanisms of action of allelochemicals in allelopathy.
ACS Symp. Ser.; 582 : 96-116 .

El-Antably, H.M.M., S.S. Ahmed and M.N.A. Eid. (1975).
Effects of some growth hormones of plant vigour volatile oil of *Origanum majorana L.*
Pharmazie; 30:400-401.

El-Assiouty, F.M.M. (1983).
Effect of some minor elements and growth regulators on growth and dry seed yield of Giza-3 common bean cultivar.
M.Sc. Thesis, Fac. Agric., Moshtohor, Zag. Univ.

El-Gamal , M. S. (1985) :
Effect of gibberellic acid and indole acetic acid on growth nodutalism and nitrogen fixation in Serbania sesban plants (L.) merrill. Annals Agric. Sci., Fac. Agric. Ain Shams Univ., Cairo , Egypt. 30 (1), 75-92

El-Hadidi, A. S.; Helaly, A. N. M. and El-Ashry , M. M. (1985).
Response of soybean plants to some growth substances combination with micronutrients. 2nd Mon. Con. Agric. Botany Sci., 21-24 Sept. 1985 .

El-Hyatemy, Y. and A.M. Rammah (1984)
Effect of using some chemicals as plant growth regulators on the forage and seed yield of Egyptian clover.
Second Conf. A.R.C. Giza, 9-11 April.

Elia, A.; G. Damato; L. Quagliotti and P. Belletti (1994)
Growth regulators, dates of treatments , yield and quality of broad bean (***Vicai faba L.***) and florence fennel (***Foeniculum valgar*** Mill. var. azoricum Thell.) "seed".
Acta Horticulturae ; 362 : 83-89.

Elliott, M. C. (1977).
In Plant Growth regulation (Pilet, P.E. ed.)
P. 100 Springer , Berlin.

El-Set A.A. (1994).
Effect of raw spacing and some growth regulators on two cultivars of lentil.
Ph.D. Thesis, Fac. Agric. Zagazig University.

El-Sherbeny, M. A. (1980)
Physiological studies on ***Vicai faba L.*** treated by gibberellic acid.
Al-Azhar Agric. Res. Bull. No. 42.

El-Tantawy, A., Shehata, A. S., and Mohamed, S. Y. (1994).
Effect of Chemical fertihiation and gibberellene spray on the growth and chemical composition of cupressns sempervirens var. Horiyiontatis seedings. Egypt. J. Appl. Sci., 9 (4) 323-344.

El-Waziry, S.M. and Abo El-Lil, G. (1978).
Control of shedding flowers and pod by using some growth regulators in *Vicia faba L.*
Arab Journal of Agric. Res. 56-60.

El-Zeiny, H.A.; M.A. Ashoub and M.H. Mahmoud (1987)
Effect of different levels of soil moisture and gibberellic acid in faba bean (***Vicia faba L.***)
Annual of Agric. Sci. Ain Shams Univ. Cairo, Egypt; 32 (1) : 179-198.

Eriksen , E. N. and S. Mohamed (1974).
Root formation in pea cuttings. II. The influence of indole-3-acetic acid different developmental stages.
Ibid; 30 : 66-70.

Eweida, M.H.T.; M.A. Rizk; A.M. Hassanein and M.M. Shabin (1984)
Yield and Yield components as affected by the foliar application of CCC on wheat variety Chenab. 70.
Agric. Res. Rev.; 62 (4A) : 101-109

Fahmy, R.; Sawsan A.E.; Shahira, A.A. and Rady M.A. (1983).
The effect of gibberellic acid on the germination rates and seedlings properties of kanaf and roselle . Agric. Research Review, Vol. 61, (8), 136-150.

Farag , S. A. , M.Z. Farrag and Shafshak, Nadia, S. (1987).
Effect of Phosphorus fertilizer and gibberellic acid spray on growth chemical composition , flowering and seed production and quality of cowpea. Annals of Agric. Sci., Moshtohor, Vol. 25 (2), 1027-1040 .

Follenberg, G. (1978).
Entwick lungs physiologie der pflanzen.
Ulmer Stuttgat. W. Germany.

Fouda, R.A. and S.M. Salama (1998)
Effect of Paclohutrazal Ethral and Gibberellic acid on growth, yield and anatomical structure of peanut plants . J. Agric. Sci., Mansoura Univ., 23 (4) : 1559-1573.

Gale, M.D.; J. Edrich and F.G.H. Lupton (1974).
Photosynthetic rate and the effects of applied gibberellin in some dwarf, semi-dwarf and tall wheat varieties.
J. Agric. Sci. Camb. 83 : 43-46.

Garcia, H.M.; E. Davies ; T.I. Baskin and P.E. Staswick (1996).
Association of plant 40 protein with ribosomes is enhanced when polyribosomes form during periods of active tissue growth .
Plant Physiol.; 111 (2) : 559-568.

Goris , A. and R. Bouriquet (1970).
Effect of ABA and its hydrazide on growth and carbohydrate composition of carrot tissues cultivated in vitro.
Chem. Abst.; 73 : 2867u.

Groudiene, J. and V. Zriranajte (1971)
Effect of IAA on growth and synthesis of N Compounds in lucerne , Lict TSR Aukstuju Makyklu Mosklo. Darbai, Piolojia , 11, 77-87 .

Haissig, B. E. (1970).
Influence of indole-3-acetic acid on adventitious root primordia.
Planta; 95 : 27-35.

---------- (1972)
Meristematic activity during adventitious root primordia development. Influence of endogenous auxin and applied gibberellic acid.
Plant Physiol.; 49 : 886-892.

Harb, E. Z. (1992a)
Effect of foliar application with GA_3 and micronutrients on growth and productivity of soybean plants grown under different levels of fertilization.
Bull. Fac. Agric., Cairo Univ.; 43 (1) : 411-427.

---------- (1992b).
Effect of soaking seeds in same growth regulators and micronutrients on growth, some constituents and yield of faba bean and cotton plants.
Bull. Fac. Agric. Univ. Cairo ; 43 (1) : 429-452.

Hassan , E. A. (1982).
Growth correlation in ***Vicia faba L.*** 1.6. The influence of growth regulators on growth distribution in two-unequal lateral shoot plants.
Res. Bull. Fac. Agric. Ain-Shams Univ. No. 2119

Hassan, H.A.; A.; E.M. Koriesh; A.A. Waly and Y.M. Fattah (1991).
Effect of GA_3 on vegetative growth flowering fresh and dry weights and the total carbohydrates of ***Gerbera jamesonu,*** Hook.
Egypt. J. Appl. Sci.; 6 (6) : 220-235.

Hassanin , A. M. (1979).
Effect of gibberellic acid and naphthalene acetic acid on the salt tolerance of Egyptian clover .
Proc. 3rd Arab Pesticide Conf. Vol. IIA., Tanta Univ., Egypt.

Hayashi, T. (1963).
The effect of gibberellin treatment on the photosynthetic activity of plants. Plant Growth Regulation , Fourth international conference in Plant Growth regulation , the Iowa State University Press, Ames., Iowa, U.S.A. P. 575-588.

Hew, C.S.; C.D. Nelson and G. Krotkov (1967).
Hormonal control of trnaslocation of photosynthetically assimilated C_{14} in young soybean plants.
Aw. J. Botany; 54 : 252 .

Hussien , M. S. (1980).
Study on the effect of some agricultural treatments on the quantity and quality of lemon grass oil.
M.Sc. Thesis., Fac. of Agric. Al-Azhar Univ.

Ibrahim , D.M.; M. A. Khafagy and A. M. Abo El-Kheer (1990).
Some growth substances affecting the growth , chemical composition and alkaloidal content of lupinus termis, L.
Egypt J. Appl. Sci., 5 (7) : 767-581 .

Ivanov, A.T. (1970).
Effect of plant growth regulators on lucerne growth with irrigation and under severe dry land conditions in N. Priarlyes. Dokl. vses Akad. Nauk, No. 7, 13-16.

Jackson (1973).
Soil Chemical Analysis.
Prentic-Hall of Indian Prevate Limited, New Delhi.

Jain , S.C.; Madhu-Agrawal and M. Agrawal (1987)
Effect of GA_3 and IAA on metabolotes status in ***Trigonella foenum graecum L.***
Indian J. Botany ; 10 (2) : 138-140.

Jones, J.B.; B. Wolf and H.A. Mills (1991).
Plant Analysis Handbook.
Micro-Macro Publishing Inc.

Jones, R. (1973).
Gibberellins , their physiological role.
Ann. Rev. Plant Physiol., 24 : 571-598.

Jones, T.W.A. and A.M. Thomas (1993).
Flowering and gibberellins in a mutant red clover (***Trifolium pratense L.***).
Plant Growth Regulation ; 12 (1-2) : 11-16.

Kamal, M.; H. Takahashi ; H. Mikoshiba and Y. Ota (1995).
Analysis of soybean yield components as affected by plant growth regulators applied at flowering stages.
Japanese J. Tropical Agric.; 39.(3) : 184-189.

Kaminek , M. (1967)
Root formation in pea stem sections and its inhibition by kinetin ethionine and chloramphenicol.
Biol. Plant.; 2 : 86-91.

Kavaliauskiene, D. and A. Balciuniene (1983)
Effect of IAA on the growth and accumulation of physiologically active compounds in ***Chenopodium botrys L.***
Lietuvos. TSR. Aukstuju Mokylu Mokslo Darbai, Biologija ; 21 : 55-63.

Khafagi, O.M.; M. El-Monayeri ; H. El-Tantawy and S. Tahoun (1990)
Effect of soil moisture stress, GA_3 and CCC on mineral ions content of alfalfa plants.
Egypt. J. Appl. Sci.; 5 (3) : 101-116.

Khalil , S. and H.A. Moursy (1976)
Combined effect of gamma radiation and indole-3-yl-acetic acid on some aspects of growth and chemical composition of squash (***Cucurbito pepo L.***).
Z. Acher-und Pflanzeubau.
(J. Agron. and Crop Sci.; 143 : 213-222)

Khare, D., S.R. Ramgisy and R.S. Shukla (1993).
Growth regulators and potential of ***Vicia faba L.***
Adv. Plant Sci.; 6 (2) : 321-324.

Koriesh, E.M. (1989).
Effect of storage temperature and some chemicals on growth, flowering and bulb production and some chemical components of ***Iris tingitana L.*** cv. Ideal.
Egypt. J. Appl. Sci.; 4 (1) : 47-57.

Koukourikon , P. M. and I. Porlingis (1997).
Presowing application of gibberellic acid on seeds used for the mung bean bio-assay , promotes root formation in cuttings.
Scientio Horticulturae; 70 (2-3) : 203-210.

Koval , Yu. V. and V.S. Lupan (1990).
Nitrogen compounds in sugar beet seeds on treatment of stecklings with trace elements and growth regulators.
Izvestiya Akademu Nauk Moldavskoi SSR,10.
Biologicheskie i Khimicheskie Nauki, (2) : 22-26.
C.F. Field Crop. Abst.; 44 : 1988.

Krishnamoorthy, H.N. (1981).
Plant Growth Substances.
TATA McGraw-Hill Publishing Company Limited.

Krylov, S.N.; S.M. Krylovo; I.G. Chebotarev and A.B. Chebotarevo (1994).
Inhibition of enzematic indole-3-acetic acid oxidation by phenols.
Phytochemistry; 36 : 263-267 .

Lee , H.S. (1990).
Effects of pre-sowing seed treatments with GA_3 and IAA on flowering and yield components in groundnuts.
Korean J. Crop. Sci.; 35 (1) : 1-9 .

Lee, T.T.; A.N. Starratt , P.N.P. Chow, C.A. Grant ; A.M. Hinshalwood and E. Simundson (1989) .
Phenol-glyphosate interaction : effects on IAA metabolism and growth of plants.
Adjuvants and agrochemicals; 1. (Mode of Action and physiological activity) : 35-40.

Leopold, A.C. and P.E. Kriedemann (1975).
Plant Growth and Development.
Mc Graw-Hill, Inc., New York.

Linda , W. Autoun (1995).
Biochemical Changes in sunflower during growth as affected by indole-acetic acid and boron.
M. Sc. Thesis, Fac. Agric., Cairo Univ.

Mahmoud , M. H. and I.M. Abdel-Aziz (1985).
Influence of pre-soaking with gibberellin on growth, nutrients uptake and carbohydrate content under salinity condition.
Z. Acher-und Pflanzenbau (J. Agron. and Crop. Sci.; 155 : 111-120)

Marcelle. R. and G. Oben (1973)
Photosynthesis and productivity.
Vol.6, Akoyunolon, G. (ed) 1981, p. 349-357.

Mehetre, S.S. and S.K. Lad (1995).
Effect of foliar application of growth substances on growth and yield .
Soybean Genetics Newsletter, 22 : 132-134.

Mohamed, H.R. (1993).
Physiological studies on the metabolic activity of some rosaceae leaves.
Ph.D. Thesis, Fac. Agric. Univ. Cairo.

Mohamed , N. A.; M.K. Ahmed and M.E. Mousa (1992)
Effect of indole acetic acid on the morphology and chemical composition of alfalfa.
Egypt. J. Agric. Res.; 70 (4) : 1151-1175.

Montague, J.M. (1995).
Gibberellic acid and promotes growth and cell wall synthesis in ***Avena sativa*** internodes regardless of the orientation of cell expansion.
Physiol. Plant.; 94 : 7-18 .

Montgomery , R. (1961)
Further studies on the phenol sulphuric acid reagent for corbohydrate .
Biochem. Biophys. Acta; 48 : 591.

Nabila ; M. N. and F.A. Nagwan (1996)
The effect of gibberellic acid on growth, yield , photosynchetic pigments and chemical composition of safflower (***Carthamus tinctoria***) grown on calcareous soil.
Egypt J. Appl. Sci.; 11 (7) : 91-101.

Naphade, K. T.; B.N. Sagare and B.G. Joshi (1986)
Effect of seeds soaking with chemicals on yield and nutrient uptake by sunflower.
J. Maharashtra Agric. Univ.; 11(2) : 189-192.
C.F. Biological Abst.; 83 (3) : 20106.

Naylor, A.W. (1984)
Functions of hormones at the organ level of organization.
In Encyclopedia of Plant Physiol, New Serie Volume 10. In Hormonal Regulation of Development. Springer-Verlag, Berlin, Heidelberg, New York, Tokyo .

Nisha , R.; K. Pramad ; R.P. Raghava ; N. Raghava and P. Kumar (1996)
Leaf growth , nodulation and yield performance in cowpea as influenced by growth regulators .
Plant Physial. and Biochem. New Delhi; 23 (1) : 85-90 .

Nishitani , K. and Y. Masuda (1981)
Auxin-induced changes in the cell wall structure changes in the sugar compositions intrinsic, viscosity and molecular weight distributions of matrix phoysaccharides of the epitotyl cell wall of vign a angularis (IAA , arabinogalactans, auxin; azuki bean, extension growth , gel permneation chromatography, hemicellulose, indole-3- acetic acid, mechanical property, molecular weight, pectin, viscosity xyloglucans).
Phyt. Planta.; 52 : 482-494.

Norries , I.B. (1989)
The effects of gibberellin A_3 on white clover during floral development.
Annals of Applied Biology ; 115 (1) : 157-160.

Nowak , G.A. and J. Czapla (1991).
Respnse of soybean to gibberellin A_3 application under conditions of high boron availability.
J. Plant Nutrition ; 18 (10) : 2179-2190.

Olvra , S.E. (1986)
Effect of hormones IAA, GA and cytokinin on the morphological development of ***Leucaena lencocephala*** (Lam-de wit)
Plant Growth Regulators Abst., 12 : 1281.

Omar, N. M.; M.M. Kandil and M.M. Hussein (1986)
Some effects of water deficit on status of ***Vicia faba*** plants.
Egypt. J. Agronomy; 11 (1-2) : 43-52.

Patrich, J. W. (1983)
Photosynthate underading from seed of ***Phaseolus vulgaris L.*** Pflanzenphy sol, 111 : 9-18 .

---------- and P.F. Wareing (1982).
Hormonal control of assimilate movement and distribution.
DPGRG BPRG Symp.; pp 65-84.

Pauline, M.T. and K.D.F. Rollo (1986)
Boron and calcium sites involved in indole-3- acetic acid transport in sunflower hypocotyl segments.
Plant Physiol ; 81 : 651-655.

Raghuwanshi, A.; S.S. Dudeha and A.L. Khurana (1992)
Effect of nod and growth regulators on nodulation of pigeonpea [***Cajanus cajan (L.)*** Mill sp].
Legume Research, 15 (2) : 91-96.

Rashad, M.H. and A.H.H. Ahmed (1996).
Physiological studies on the effect of gibberellin on faba bean plant.
J. Agric. Sci. Mansoura Univ.; 21 (11) : 3951-3969.

Ray, S. and M.A. Choudhuri (1981).
Effects of plant growth regulators on grain filling and yield of rice.
Annals of Botany; 47 (6) : 755-758.

Reena-Tagade ; R.D. Deatale ; Sunita-Sable, C.N. Chore ; R. Tagade and S. Sable (1998).
Effect of IAA and kinetin on biochemical aspects and yield of soybean.
J. Soils and Crops ; 8 (2) : 172-175.

Richards , L. A. (1954).
Dragnosis and improvement of saline and alkali soils.
U.S.Dept. Agric. Handbook 60.

Sakr, R.A. and R.A.K. Moustafa (1988)
Effect of single and combined treatment of gamma rays and ethrel on cowpea plants Proc.
Conf. Agric. Develop. Res., Ain Shams Univ.

Salisbury , F.B. and C.W. Ross (1978).
Plant Physiology .
Wads worth Publishing Company, Inc.

Sambaiah , D.; L. Narsaiah and K.J. Reddy (1993).
Interaction of some growth regulators on physio-morphological and cytological features in early seedlings of ***Vigna radiata*** var. PS.16.

Sankhla, N. and W. Huber (1974).
Effect of ABA on activities of photosynthetic enzymes and CO_2 fixation products in leaves of ***Pennisetam typhoides*** seed lings.
Physiol. Plant.; 30 : 291-294.

---------- (1975).
Regulation of balance between C_3 and C_4 pathway. Role of ABA .
Pflanzen Physiol.; 74 : 267-279 .

Sestak, Z. and I. Ullmann (1960).
The effect of gibberellic acid on the dynamics of chlorophyll synthesis in erolated seedling.
Biol. Plant.; 2:43.

Shaddad, M.A. and M. A. El-Tayeb (1990).
Interactive effects of soil moisture content and hormonal treatment on dry matter and pigment contents of some crop plants.
Acta. Agronomica Hungarica, 39 (1-2) : 49-57.

Shahine, A.H.; S.A. El-Desouky ; M.H. Abd-El-Dayem and A.L.I. Wanas (1992a)
Response of fenugreek (***Trigonella foenum graecum L.***) and pea (***Pisum sativum L.***) to foliar spray with some growth regulators.
I-Germination, growth and photosyuthetic pigment.
Annals of Agric. Sci., Moshtohor; 30 (2) : 739-754.

Shahine, A.H.; S.A. El-Desouky ; H.M. Abd-El-Dayem and A.L.I. Wanas (1992b)
Response of fenugreek (***Trigonella foenum graecum L.***) and pea (***Pisum sativum L.***) to foliar spray with some growth regulators.
II-Flowering , dry weight , seed production and its organic matter content.
Annals of Agric. Sci., Moshtohor; 30 (2) : 755-775.

Shams El-Din, G.M. and M.I.M. Salwau (1994).
Effect of weed control and rates of IAA on productivity of faba bean and associated weeds.
Annals of Agric. Sci., Moshtohor ; 32 (3) : 1119-1130.

Sharma, C. (1982).
Effect of hormonal treatments during seed development on the vigour of subsequently formed seeds of ***Pisum sativum*** T163 and ***Vicia faba.***
Indian J. Plant Physiol; 25 (4) : 377-381.

Sharma , P.K. ; S.S. Kolhe and R.S. Tripathi (1994).
Influence of level of phosphorus, interculture and indole-3-acetic acid on growth and nodulation in greengram (***Phaseolus radiatus***).
Indian Journal of Agronomy; 39 (3) : 479-481.

Shrivastava, S. and H.S. Chawla (1993).
Effects of seasons and hormones on pre-and postfertilization barriers of crossability and in vitro hybrid development between ***Vigna unguiculata*** and ***Vigna mungo*** crosses.
Biologia Plantarum; 35 (4) : 505-512.

Simko, J. (1984).
Effect of B-indole acetic acid on lucerne Yield-P of nohospoder stov, 10 (1) : 22-33.

Singh, D.B. and T.V.R.S. Sharma (1996).
Effect of GA_3 , NAA and 2,4-D on growth and yield of cowpea [***Vigna unguiculata (L)*** Walf] variety Arka Garima.
Flora and Fauna Jhansi; 2 (1) : 5-6.

Skalska , M. (1992).
Effect of growth regulators on morphological traits, Chlorophyll content and seed yield of lucerne (***Medicago sativa L.***) in pot experiments.
Biuletyn Instytutu Hodowli-i-Aklimatyzacji Roslin No. 184 : 59-66.

Smith, F.; M.A. Gilles; J.K. Hamilton; P.A. Robers and M. Dubois (1956).
Colorimetric method for determination of sugars related substances.
Anal. Chem.; 28,350.

Snedecor, G.W. and W.G. Cochran (1974).
" Statistical Methods "
6th ed. The lowa State Univ. Press, Lowa, USA.

Snell, F.D. and G.T. Snell (1953).
Colormetric methods of anaylsis including some turbidimetric and nephelometric methods.
D.Van. Nostrand Company Inc., Torento, New York, London.

Soheir, K. and M.M. Hanan (1989).
Growth and metabolic changes of cowpea plants as effected by water deficiency and indol-3-Y1-acetic acid.
J. Agronomy and Crop Science, 163 : 160-166.

Stenlid, G.C. (1976).
Effect of flavonoids on the palar transport of auxins.
Physiol. Plant., 38 : 262-266 .

Swain, T. and W.E. Hills (1959).
The Phenolic constituents of ***Prunus domestica.*** The quantitative analysis of phenolic constituents.
J. Sci. Food, Agric.; 10 : 63-68.

Swamy, A.V.S R. and V.K. Khanna (1990).
Application of special techniques to improve seed-set in interspecific crosses in Cicer.
International-Chickpea Newsletter No. 23 : 8-10.

Takano, M.; H. Takahashi and H. Suge (1995).
Mechanical stress and gibberellin : regulation of hollowing induction in the stem of a bean plant, ***Phaseolus vulgaris L.***

Thimann, K.S. (1974).
Fifty years of plant hormone research .
Plant Physiology; 54 : 450-453.

Tisdale, S. and W. Nelson (1975).
Soil Fertility and Fertilizers.
Macmillan Publishing Co., Inc. 3rd ed.

Trewavas, A. (1980).
An auxin induces the appearance of auxin-binding activity in artichoke tubers.
C.F. New-Phytol . (1983) 95., 509-518.

Van-Schouwenburg, Jr. J. Ch. and I. Woling (1978)
Methods of Analysis for Plant Material.
Agric. Univ. Wageningen. The Netherlands.

Warren, W.J. and W.P.M. Warren (1984)
Control of tissue patterns in normal development and in regeneration.
Physiol Plant; 81 : 234-238.

Wettestein, D. (1957).
Chlorophyll-lethal und der submikroskopische formivechsel der plastiden.
Exptl. Cell. Res.; 12:427-433.

Wright, S.T.C. (1981)
A sequential growth response to gibberellic acid kinetin and indole-3-acetic acid in the wheat cleoptile ***(Triticum vulgare L.)***
Nature ; 190 : 699-700.

Younis, M.E.; H.A. Fouda and A.S. El-Ghobashy (1971).
Experimental studies on plant metabolism.
II. The effect of gibberellic acid on the carbohydrate, nitrogen and oil content of *Ricinus communis.*
Physiol. Plant.; 24:411-418.

Zhang, F.; B. Pan; D.L. Smith; F. Zhang and B. Pan (1997)
Application of gibberellic acid to the surface of soybean seed (***Glycine max L.*** Merr.) and symbiotic nodulation, plant development, final grain and protein yield under short season conditions.
Plant and Soil; 188 (2) : 329-335.