

Department of Botany

Annual Report - March, 2019

College was reopened on 4th June 2018 for the academic year 2018-19. Holy mass was organized for the staff by college management. Rev.Fr.Amman Raju, Parish priest, Rev.Fr.Maria Kumar, Assistant Parish priest offered the holy mass. Sr. Lourdu Mary, Superior and Correspondent, address the gathering and welcome the staff for the new Academic year. A general body meeting was conducted by Principal Dr.Sr.P.Mercy for the faculty members and assigned the duties such as time table setting, work load allotment and planning of department activities for the academic year 2018-19. Classes were started on 6th June 2018 for II & III year degree students and on 20th June 2018 for I Year degree students.

Number of BZC students on the rolls for the academic year 2018-19

S.No	Class	No. of students admitted	No. of students left	No. of students newly admitted	Present strength
1	I BZC	70	5	--	65
2	II BZC	63	--	--	63
3	III BZC	62	--	--	62

Work load of Botany was distributed equally among 3 members of the department. Syllabus was planned & classes were taken accordingly. Faculty members succeeded in taking classes regularly and completed the syllabus in time.

Results: October 2018 results

S.No	Class	Paper	Semester	Number of students appeared	Number of students passed	Number of students failed	Pass percentage
1	I BZC	I	I	63	60	3	95.24%
2	II BZC	III	III	61	61	nil	100%
3	III BZC	III	V	62	62	nil	100%
4	III BZC	IV	V	62	62	nil	100%

Results: April 2019 results

S.No	Class	Paper	Semester	Number of students appeared	Number of students passed	Number of students failed	Pass percentage
1	I BZC	I	II	59	56	3	94.92%
2	II BZC	IV	IV	60	58	2	96.67%
3	III BZC	VII	VI	62	62	nil	100%
4	III BZC	VIII A1	VI	20	20	nil	100%
		VIII A2	VI	20	20	nil	100%
		VIII A3	VI	20	20	nil	100%

To improve the subject skills of average and above average students, the teaching and learning methods implemented were, Power point presentations, Seminars, Discussions, Quiz Programmes. For the slow learners Field study, Group study, Question & Answer sessions methods were implemented during remedial coaching.

Botany Activities 2018-19

Guest Lectures:

Five Guest lecturers were organized for I, II & III BZC students in 2018-19.

1. **4th July 2018:** Dr.T.Thomson, Asst Prof in Horticulture University gave a demo on “Hi-Tech Nursery Management” to II BZC students.
2. **4th July 2018:** Mr.Ravindra, Chair person of Krishi Vignan Kendram gave a lecture on “Poly House culture Techniques” to II BZC students.
3. **14th February 2019:** Dr.G.Ramesh, Head of Botany department, KBN College, Vijayawada, **delivered a lecture** on “Carrier opportunities in Botany” to II & III BZC students.
4. **14th February 2019:** Dr.J.Vijaya Kumar, Technical Executive, Mondelez India foods Private Ltd, Eluru, West Godavari, gave a lecture on “Additional Qualifications for job opportunities along with B.Sc Degree” to II & III BZC students.
5. **25th February 2019:** Mrs.Hima Bindu and Mrs. Sonia Priya Darsini, Faculty in P.G. English department delivered a talk on “Opportunities for Higher Education” to III BZC students.

Field Trips:

1. **3rd July 2018: Field Trip** – A field trip to II BZC students to ‘Surya Nurseries’ near Kalaparru. Mr. Subrahmanyam trained 30 students on ‘Seedling Raising’. Faculty members Dr.N.Nagavardhanam and Mrs.G.Rani accompanied the students.
2. **4th July 2018: Botanical Tour** - A Botanical field trip was organized by Dr.N.Nagavardhanam HOD botany, for II and III BZC students to Dr.Y.S.R. Horticulture University, Venkataramannagudem. 60 students were participated and enriched themselves on various horticulture techniques.
3. **26th September 2018: Field visit** - Botany Department organised a field visit to II B.Z.C students with in the college campus. Students recorded, variety of plants found in the college campus. They documented the plants common names, botanical names and families which enriched the Taxonomic knowledge of the students.
4. **5th to 12th November 2018: Botanical Tour** – Botany faculty Dr.N.Nagavardhanam, Mrs.B.B.R.G.Vijaya Lakshmi and Mrs.G.Rani organized a **one week** Botanical tour for II & III BZC students to Delhi, Agra, Madura and Amritsar. 46 students were participated and benefited.
5. **4th December 2018: Field Trip** – Botany Department organised a field trip to III BZC cluster students to Gopala Krishna Gosala, Nachugunta, Unguturu Mandal. 18 students were participated and enriched with knowledge such as estimation of crop yield per acre, integrated cropping, mixed cropping and their advantages. Faculty members Dr.N.Nagavardhanam and Mrs.B.B.R.G.Vijaya Lakshmi accompanied the students.
6. **8th December 2018: Field Trip** – A field trip was organised to III BZC cluster students to Vijayarai. 19 students were participated. Dr.J.Vijaya Kumar, Technical Executive, gave a detailed explanation on “Cultivation of Cocoa crop, seed processing and post harvest techniques”. Faculty members Dr.N.Nagavardhanam and Mrs.G.Rani accompanied the students.
7. **8th January 2019: Field Trip** – Botany and zoology departments together organised a field trip for III BZC students to Aatapaka, Kolleru lake. 60 students were participated. Faculty members Dr.N.Nagavardhanam, Dr.R.Indira, Mrs.G.Rani, Mrs Prasanna accompanied the students.

Seminars attended, papers presented and published:

1. **29th to 30th June 2018: National Seminar** - Mrs.B.B.R.G.Vijaya Lakshmi attended to National seminar on “State of Environment: Environmental protection, Management and Governance (NS-SEEPMG)” organised by Department Environmental Sciences, Andhra University, Visakhapatnam.

Paper presentation: Mrs.B.B.R.G.Vijaya Lakshmi presented a paper on “Utilization of Crop waste in Agricultural Lands of Pedavegi Mandal”.

2. **1st September 2018:** Paper Published - Dr.N.Nagavardhanam, Mrs.B.B.R.G.Vijaya Lakshmi and Mrs.G.Rani, faculty of Botany published a paper on “Diversity of Medicinal Flora in and around Kolleru lake” in an “International Journal of Advanced Research, Ideas and Innovations in Technology” and UGC approved Journal, ISSN: 2454-132X, Paper ID: V415-1138(v4i5-1138) on September 1st 2018.

3. **27th & 28th November 2018: International Conference** - Dr. N. Nagavardhanam and Mrs.B.B.R.G.Vijaya Lakshmi attended International conference on “International Conference on Innovative Domains of Mathematics and Digital Technology (ICIDMDT)” organized by Mathematics Dept of Ch.S.D.St.Theresa’s (A) college for women ,Eluru in association with Spectrum Solutions.

Paper presentation & Publication - Dr. N. Nagavardhanam presented a paper on “Forecasting method for Cotton production by using ARIMA Model”. It was published in International journal of management, Technology and Engineering, ISSN No: 2249-7455

Paper presentation & Publication – Mrs.B.B.R.G.Vijaya Lakshmi presented a paper on “An Approach to android application controlled segway drive”. It was published in Suraj Punj journal for multidisciplinary research, ISSN No: 2394-2886

4. **24th & 25th January 2019: International Seminar** - Dr. N. Nagavardhanam and Mrs.B.B.R.G.Vijaya Lakshmi attended International seminar on “CONTEMPORARY SOUTH ASIAN LITERATURE: GENDER AND ENVIRONMENT” organised by English Dept of Ch.S.D.St.Theresa’s (A) college for women, Eluru in collaboration with Adikavi Nannaya University.

Paper presentation and Publication: Dr. N. Nagavardhanam and Mrs.B.B.R.G.Vijaya Lakshmi presented a paper on “Ethno-botanical studies of maddigadda and pinjerukonda villages near Addategela, East Godavari District, Andhra Pradesh, India” and published in an UGC approved and ISO: 7021-2008

certified “ International Journal of Research (IJR) Journal, Volume VIII, Issue I,
ISSN No: 2236-6124, January/2019.

5. **19th March 2019: National Seminar** - Dr. N. Nagavardhanam, Mrs.B.B.R.G.Vijaya Lakshmi and Mrs.G.Rani attended National seminar on “Cybercrimes and Women-Precautions and Strategies” organized by Centre for Women’s studies, Ch.S.D.St.Theresa’s (A) college for women, Eluru.

Paper presentation & Publication - Dr. N. Nagavardhanam presented a paper on “Cybercrime-Its impact on Indian Families life and Economy”. It was published in International journal of Research (IJR) Journal, Volume VIII, Issue I, ISSN No: 2236-6124, March-2019.

Workshops and Training programmes attended:

1. **7th July 2018: Workshop** - Botany Faculty Dr.N.Nagavardhanam, Mrs.B.B.R.G.Vijaya Lakshmi, Mrs.G.Rani and 65 III BZC students participated in one day work shop on ‘Vegetative Propagation Techniques’. Mr. Subbaiah, Scientist Horticulture University acted as Resource persons.
2. **5th February 2019: Workshop organized** - Botany faculty Dr.N.Nagavardhanam, Mrs.B.B.R.G.Vijaya Lakshmi and Mrs.G.Rani organised a workshop on integrated organic cropping, Bio-fertilizers and bio-pesticides to III BZC cluster students at Gopala Krishna Gosala, Nachugunta, Vunguturu Mandal.
3. **19th February 2019: Training Programme** - Botany faculty Dr.N.Nagavardhanam, Mrs.B.B.R.G.Vijaya Lakshmi and Mrs.G.Rani organized a Training programme to III BZC cluster students to on Nursery and Gardening techniques like ‘Seedling Raising’ Organic Nursery establishment and maintenance at ‘Surya Nurseries’ Kalaparru. Mr. M.Subrahmanyam and Mr.G.Suresh Acted as resource persons.

Internship Programme: 16th - 25th April 2018

1. Botany department organized Internship programme to II BZC students on “Organic farming Techniques and Nursery Management” at Dr.Y.S.R.Horticulture University, Venkataramannagudem. 14 students were attended and benefited.

Project work:

1. **29th June 2018: Project Rough Draft Submission** – 20 III BZC students submitted rough draft of projects on Preparation of Biopesticides, Preparation of

Ghanajeevamrutham and Preparation of Nadep compost Under the Guidance of Dr.N.Nagavardhanam, Mrs.B.B.R.G.Vijaya Lakshmi and Mrs.G.Rani respectively. Dr.P.Jyothi Kumari, HOD of Nutrition reviewed the projects.

2. 17th July 2018: Project Viva – External viva panel members:

Dr.K.S.V.K.S.Madhavi Rani, Senior Lecturer in Zoology, Ms.A.Anantha Lakshmi, Lecturer in Physics acted as external panel members and Dr. N.Nagavardhanam, HOD of Botany acted as Internal Viva Panel member. Mrs.B.B.R.G.Vijaya Lakshmi acted as external Viva panel member to BBA students. Mrs.G.Rani acted as external Viva panel member to B.A (Politics) students.

Topics:

- A study on “Preparation and Applications of Bio-pesticides with reference to Leaf decoctions”.
- A study on “Preparation and Applications of Ghana-Jeevamrutham in crops and vegetable plants – A boon to rural farmers”.
- A study on “Preparation and Applications of Nadep Compost”.

Botany Week Celebrations: 2nd July to 8th July 2018

Botany department is organizing Botany week celebrations every year on one theme to bring out the hidden talents in the students. The theme for this year i.e 2018-19 is ‘Save Mother Earth’. The following programmes were organized by the Botany department. **In this** connection Botany department also organized various competitions like Flower bouquet preparation, Vegetable carving, Mehendi competition, Poster painting, Greeting card preparation, floral carpet and Model preparation to the students of various disciplines. Total 96 students participated in these competitions. Prizes were distributed to the winners.

1. **3rd July 2018: Field Trip** – A field trip to II BZC students to ‘Surya Nurseries’ near Kalaparru. Mr. Subrahmanyam trained 30 students on ‘Seedling Raising’. Faculty members Dr.N.Nagavardhanam and Mrs.G.Rani accompanied the students.
2. **4th July 2018: Botanical Tour** - A Botanical tour was organized for II and III BZC students to Dr.Y.S.R. Horticulture University, Venkataramannagudem. 60 students were participated and enriched themselves on various horticulture techniques. On the same day Dr.T.Thomson, Asst Prof in Horticulture University gave a demo on “Hi-Tech Nursery Management”. Mr.Ravindra, Chair person of Krishi Vignan kendram delivers a guest lecture on “Poly House culture Techniques”. Faculty members Dr.N.Nagavardhanam and Mrs.B.B.R.G.Vijaya Lakshmi accompanied the students.

3. **5th July 2018: Training Programme** - Dr.N.Nagavardhanam, Head of Botany department, provided a training programme to I and II BZC students on ‘Azolla cultivation-an eco-friendly bio-fertilizer’.
4. **6th July 2018: Azolla Cultivation** - Botany department established ‘Azolla cultivation unit’ in department Shade net with the help of trained students in order to minimize the use of synthetic fertilizers in the agricultural lands of college and to reduce the soil pollution.
5. **7th July 2018: Workshop** - Botany Faculty Dr.N.Nagavardhanam, Mrs.B.B.R.G.Vijaya Lakshmi, Mrs.G.Rani and 65 III BZC students participated in one day work shop on ‘Vegetative Propagation Techniques’. Mr. Subbaiah, Scientist Horticulture University acted as Resource persons.
6. **8th July 2018: Plantation Programme** - In correlation to Vanamahothsav day, Botany department organised plantation programme. I and II BZC students planted about 100 medicinal plants in Botany herbal garden.

7. Prize winners list:

S.No	Event	1 st prize	2 nd prize
1	Vegetable Carving	V.Naga Chandana, II MPC-I	
2	Floral carpet	S. Swathi Durga, T. III BZC	Ch.Venkateswaramma, III BZC
3	Flower boquet prpeparation	S. Deevana, T. IBZC	Sr.Theresa, III BZC
4	Poster painting	G.Bhagya Lakshmi, III B.Com	G. Kavya Sri, I BZC
5	Greeting cards	M.Prasnthi, III BZC	K. Manasa, III H.Sc
6	Mehendi	U. Srujana, III M.S.Comp	L. George Nithya, III B.Com Comp
7	Model Preparation	D. Hema Sri, III B.Sc BZC	

Student Seminars:

1. **3rd to 7th & 11th September 2018:** I B.Sc BZC students gave a seminar on Archaeobacteria, Mycoplasma, Albugo structure & Reproduction, Economic Importance of Bacteria.
2. **6th, 7th September 2018:** II B.Sc BZC students gave seminar on Bentham & Hooker classification, ICBN, Herbarium techniques, Cucurbitaceae, Types of Embryo-sac, Structure of anther, Types of Endosperm, Poly-embryony.
3. **3rd, 4th September 2018:** III B.Sc BZC students gave a seminar on Mitosis, Mutations, Linkage, Plant cell, DNA Replication.
4. **6th & 11th September 2018:** III B.Sc BZC students gave a seminar on Ayurveda system, Naturopathy, Homeopathy, Ecological pyramid, Xerosere, Hydrosere, Components of Ecosystem and conducted Viva on Medicinal plants.

Extracurricular Activities:

1. **8th July 2018: Plantation Programme** - In correlation to Vanamahotsav day, Botany department organised plantation programme. I and II BZC students planted about 100 medicinal plants in Botany herbal garden.
2. **27th July 2018: Academic competitions** – Botany department organized Academic competitions on “Kalpatharu- Medicinal plants display” “Vignanaghani – Biology Scientists and their achievements” in Botany lab. 14 students were participated in this competition. Dr.D.Madhu Malathi, HOD of P.G. Economics, Dr. M.Padmaja, Lecturer in Nutrition acted as Judges.
3. **2^{1st} July 2018: Club Activities – QUEST** – During the club hour Botany dept selected P.Rajeswari as Club President, Vishnu Priya as Club secretary for the academic year 2018-19. Divided the students into 6 groups and named as Rose, Lotus, Jasmine, Orchids, Tulips and Petunia.
4. **6th and 18th August 7th & 8th September 2018: Azolla Inoculation** - II & III BZC students harvested inoculated Azolla in paddy fields of St. Ann’s convent to minimize the use of synthetic fertilizers in the agricultural lands and to reduce the soil pollution. After one week students observed the paddy fields of college campus. Students were excited very much as they witness, enormous growth of Azolla in entire paddy field. It reduces the use of synthetic fertilizer.

5. **From 6th to 9th August 2018: Earn While Learn** - III B.Sc botany students established a tiny nursery by propagating few ornamental plant varieties through stem cutting which is one of the vegetative propagating techniques. At present the nursery contains 100 saplings. The students are marketing the saplings as a part of 'Earn while Learn' programme.
6. **17th September 2018: Azolla as Animal Feed** - III B.Z.C students harvested Azolla and supplied as food supplement to cattle and cows of St. Ann's Convent to increase the milk production. They received the feedback from farmer that milk production has been increased.
7. **4th February 2019: Loyola College 'Vruksha Seminar and competitions'** - II BZC and III BZC students of our college attended one day seminar 'VRUKSHA-2019' organised by PG Botany department, Andhra Loyola College, Vijayawada. Mrs.G.Rani accompanied the students. All the Students participated in various competitions and won prizes. Ms. Sai Sree - II BZC won 1st prize in Spot painting, Ms.D.Hema Sri – III BZC won 2nd prize in Poster painting.