

NATIONAL AGRICULTURE EDUCATION ACCREDITATION COUNCIL

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**Report of the
Accreditation Inspection Committee
(AIC)**

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**The Chairman
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**Subject: Accreditation Inspection Committee's (AIC) Report
Deptt. Of Entomology, University College of Agriculture &
Environmental Sciences, The Islamia University of Bahawalpur**

Sir:

Reference your letter No. 853/NAEAC/ HEC-2013 dated Feb.11, 2013, on the above subject the committee visited the Deptt. Of Entomology, University College of Agriculture & Environmental Sciences, The Islamia University of Bahawalpur and conducted the accreditation through review meetings, interviews, individual meetings and group consultations and visits, etc. as per schedule given to us.

The report prepared by the committee is hereby submitted for your kind perusal and further necessary action. We are thankful to you for providing an opportunity for the above important assignment.

Prof. Dr. Muhammad Naeem (Convener)

Chairman,

Department of Entomology,

PMAS-Arid Agriculture University,

Rawalpindi

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ACKNOWLEDGMENT

The assessment Team is grateful to the Worthy Vice Chancellor, The Islamia University of Bahawalpur, for providing cooperation and facilitation.

We are also thankful to the NAEAC for their assistance guidelines and logistic support during the assessment process. The support provided by Chairman NAEAC, Mr. Naseer Alam Khan (Secretary), and Malik Muhammad Kashif Anwar (Admin Assistant), NAEAC Secretariat is highly acknowledged.

Accreditation Inspection Committee (AIC)

NAEAC

General

NAEAC Inspection Team

The Chairman NAEAC nominated an Accreditation Inspection Committee (AIC) for the evaluation of Deptt. Of Entomology, University College of Agriculture and Environmental Sciences, The Islamia University of Bahawalpur for accreditation. The committee comprised of the following members who undertook a visit to the said institution on Feb.27-28, 2013.

1. Prof. Dr. Muhammad Naeem (Convener)

Chairman,
Department of Entomology,
PMAS-Arid Agriculture University,
Rawalpindi

2. Dr. Muhammad Razzaq (Member)

Chairman,
Department of Entomology
UCA, BZU, Multan

The Accreditation Inspection Committee shall have the following **TORs**:

- To validate the self-assessment report (SAR) of the degree programs; B.Sc. (Hons.) and M.Sc (Hons) prepared by the Department of Entomology, The Islamia University of Bahawalpur
- To carryout external evaluation of the degree programs in a transparent, neutral, holistic and participatory manner for accreditation and rating **based on seven (7) evaluation criteria given in the Evaluation Manual.**
- To submit a synthesized and concise analytical report (4-5 pages only) consisting of SWOT Analysis and actionable recommendations based on the interactions with the Dean, Chairman, Faculty Members, Students and Support Staff and alumni as well as detail visit of physical infrastructure, facilities and other teaching- learning resources available for the degree programs.
- To submit clear, specific and justified degree programs accreditation and rating recommendations to the Chairman-NAEAC.

Executive Summary

The University College of Agriculture & Environmental Sciences was established in 2005. The Department of Entomology was working under the umbrella of the college since 2005. The Department of Entomology was declared as separate department on 13.11.2012. The degree program of B.Sc. (Hons.) Agriculture, with specialization in Entomology is being offered since 2005 with centralized system of University College of Agriculture & Environmental Sciences. Four (04) batches of B. Sc. (Hons.) Agriculture with specialization in Entomology have been passed out so far while two (02) batches are currently studying for their B.Sc. (Hons.) degree in discipline of Entomology. Ninety (90) students were enrolled and graduated in B.Sc. (Hons.) Agriculture (Major: Entomology) from 2005 to 2012. While, the degree program of Fifty (50) students is in progress in the department. Out of Fifty (in progress) students, 23 students are expected to complete their degree in 2013 and 27 students will complete their degree in 2014. The M.Sc.(Hons.) Entomology degree program was started in 2011. Two batches (02) are currently doing their degree from the department. Nineteen (19) students are currently proceeding their degree in the department. Out of them, 8 students will complete their degree in 2013 and eleven (11) students will complete their degree in 2014.

Faculty members specialized in various disciplines of Entomology from inland and foreign universities. The department of Entomology has four (04) full time faculty members and three visiting members with specialization in the different field of Entomology. Out of them, two Assistant Professor are PhD qualification. Two lecturers are on study leave and in the process of completion of their Ph D. Three (03) lecturers are working as visiting faculty members. The external evaluation and accreditation team friendly discussion with faculty members. All the faculty members are satisfied with the working environment but complain to inadequate space for the laboratories and their offices. The Faculty has also published research papers (04) in peer reviewed journals from the last three years. The research findings have been published in the form of extension/recommendation brochures to reach the stakeholders. Curriculum developed by HEC through its Curriculum Review Committee (CRCs) has been adopted by the discipline. The Quality Enhancement Cell (QEC) of the University has good mechanism to improve the standards. The department has one main laboratory with sharing equipments. There is lack of Laboratory staff with require professional qualifications. There are few recommended books in the main library. Limited multimedia facility is available in the department. Students have adequate opportunities for scholarships and are satisfactory in medical and hostel facilities. The sports and transport facilities are also reasonable to fulfill the requirement of the students. The administrative authority and governance is clearly defined, and rules and procedures are well documented. The authority provide the additional benefits to the faculty in respect of 16000 per publication and this incentive is gradually increased with the high impact factor journals (20,000 for IF 1-3, and 30,000 for IF 3-5). There is need to be the separate annual operational budget allocation to the department for maintenance and operation of labs. The experimental area of the farm is adequate. There is no departmental library and need a separate budget for the departmental library as well. In review meetings, the committee recommended that there is need of senior faculty member, research laborites, classrooms and faculty offices. A departmental library is compulsory which will meet the students requirements for text and reference books.

1. INTRODUCTION

Deptt. Of Entomology, University College of Agriculture & Environmental Sciences, The Islamia University of Bahawalpur

• DEPARTMENT HISTORY & MAIN FEATURES

The Accreditation Committee was given a detailed briefing by Principal and Chairman of UCA&ES regarding its history, mandate/vision, mission statement, Program goals and objectives, faculty, students, research and future plans. They also mentioned major achievements of Department of Entomology and its role in the national economy.

The University College of Agricultural and Environmental Sciences established in 2005.. The Entomology as major subject was started in 2005, and M.Sc.(Hons.) in 2011. The Department of Entomology got its separate identity in November,.2012. The Department is presently offering two degree programs viz; B.Sc. (Hons.) and M. Sc (Hons.) in Entomology. The department is trying to engaged in producing highly skilled and technically sounds man power to solve the problems relating to insect pests in field crops, horticultural crops and transferring technologies to various stakeholders. The Deptt. of Agri. Entomology has produced Ninty (90) graduates of B.Sc. (Hons.) Agriculture while the degree of Fifty (50) students is in progress. Ninteen (19) students in M.Sc. (Hons.) Entomology degree program are also in progress.

• DEGREE PROGRAMS OFFERED

- B.Sc. (Hons.) (Four years)
- M.Sc. (Hons.) (Two years)

2. CRITERION WISE ANALYSIS

Criterion I: Strength and Quality of Faculty

The Faculty members at the Deptt. of Entomology, University of College of Agriculture and Environmental Sciences are competent having current knowledge and skills in their field of specialization. Presently they are 04 full time faculty members and 03 visiting faculty members; comprising of 2 Assistant Professors, 2 Lecturers (abroad for PhD studied), 3 Visiting lecturers and lab. assistent (**Annexure # 1&II**). The range of the experience of the faculty members is from 2-6 years. According to the HEC requirement for a separate department, more faculty members should be recruited in the department.. Deptt. has produced 90 B.Sc. (Hons.) while 50 students of B.S.c (Hons.) & 19 students of M.Sc.(Hons.) are in progress.

The faculty members are satisfied with their jobs and agreed that salary package is fair and reasonable. Students are generally satisfied with lectures and practical's.

Criteria II: Curriculum Design and Development

The Department of Entomology is undertaking teaching and research for 4 years B.Sc. (Hons.) and 2 years M.Sc.(Hons.) degree programs. Curriculum developed by HEC through its Curriculum Review Committee (CRCs). The curricula has gone under major revision during the last five years through brainstorming by University Professors, Research and Extension Scientists and Business community related to agriculture. Therefore the current curricula nearly fulfill the national and international market demands. This has been implemented through faculty board of studies, academic council and university syndicate.

Majority of the students are satisfied with the academic programs and contents of the curricula. There is no mechanism exists regarding feedback of stakeholders. As a result, students are satisfied with current knowledge and skills. The faculty members of the department are also involved in serving in various fields at national and international levels. Graduate have brought good name to the programs by rendering services to pesticides companies, agriculture research and extension departments, Argi. University and various other fields.

Criteria III: Infrastructure and Learning Resources

Laboratories, class rooms and their capacity:

There is one research laboratory, which is spacious and but not equipped with safety arrangements, having equipments such as Stored grain insect rearing container, Microscope Stereoscope Binocular, Stereoscope Dissecting Binocular Microscope, Autoclave Electronic balance, Oven, and Multimedia projector. Available equipments are fully operational and utilized. However, these equipments are unable to meet the need of every student. There are two other sharing research laboratories . There is no greenhouse facility in the Department. The experimental area of the research form is sufficiently large and good management. The field area is easily approachable for the students.

Library:

Presently, there is no departmental library facility, however some of the recommended HEC curriculum books are available in the main library along with sufficient supporting books meet present requirements.

The main library contains around 53 entomological books. In addition to this few journals, relating to various disciplines in agriculture including entomology and allied subjects are also present. However, the main college library needs further improvement and fresh arrivals of journals and books. The library is linked with diegital library developed by Higher Education Commission of Pakistan, where, over 15000 full text journals and 25000 abstracted journals are available free of cost.

Experimental Farm:

A farm of five acres is well maintained and utilized for both undergraduate and postgraduate research. It needs more agricultural equipments for the improvement. The Agricultural inputs are shared and centralized with the college and Agricultural Farm of the university.

Criteria IV: Students Support and Progression

The faculty provide schedule for lectures of theory and practical classes in the beginning of each semester. The course instructor provide handouts, references of the book and related websites to the students. Multimedia facility is also available in the department. There is lack of resources for the students to get financial assistance from various sources. Facilities are available but need more for Entomological students

to get financial assistance from the University. The sport facilities are existing in the University for both outdoor and indoor games. Reasonable buses are plying in town and within the university to facilitate transportation of students.

A student-teacher interaction exists through tutorial meetings, department/faculty seminars, and workshops. Medical facilities for students are appropriate. The hostels facility is provided both for male and female students. Student's perception about the degree is considered to be positive because of ample employment opportunities both in public and private sectors, especially in pesticide in companies.

Criteria V: Research and Consultancy Activities

The Amount of research grant received during last two years is amount Rs. 1.5 million. There is no allocated departmental budget to meet the routine necessities of the department. Although 04 research papers are published by the faculty members but more effort is needed to maintain the quality.

Criteria VI: Governance and Leadership

The administration power of the University is well defined like other Public sector Universities. The chairman is responsible for all administrative and management matter of the Department under the supervision of Principal. Defined and documented rules and regulations are being implemented in day to day Governance.

There is well maintained necessary records of Alumni and but need improvement to get feedback from them. An alumni forum is established on the facebook by the department and is fully operational (entomologists.iub@groups.facebook.com). . The necessary information about the alumni is provided in this forum. Annual Calendar of activities is prepared with the help of the faculty and staff. Course files are well maintained. Regular news bulletin is issued by the University.

Criteria VII: Recent Innovations and Best Practices

- Conduction of Field surveys and workshops
- Shifting of college building's site in 'Master Plan' at suitable and accessible place
- Field and low cost tunnel facilities at agriculture farms for on-farm research
- Agri-bussiness exhibition 2013, IUB
- Workshop on Advanced teaching rhetorics and research methodologies . 20 June to 20 July, 2012 (Collaboration: SES, Germany)
- Workshop on Application of Statistics in Agriculture. April 08-10, 2008 (Collaboration: HEC)
- Workshop on Scientific Writing. April 06-08, 2009, (Collaboration: HEC)
- Seminar on Allotment of State Land to Female Agri. Graduates: Future Prospective. January 20th, 2010 (Collaboration: Chief Minister's Secretariat, Punjab)
- Workshop on 'Project Writing, Monitoring and Financing. March 26, 2011 (Collaboration: PARB and CDC)
- Seminar on 'Policy Adequacy and awareness in Agri. Financing'. March 30th , 2011 (Collaboration: State Bank of Pakistan)
- Field experiments and targeted oriented research.
- Improvement of laboratory facilities for practical and research work
- Celebration of Alumni gathering and function
- Arranging the Sports Galla

3. SWOT ANALYSIS OF THE DEPT DEGREE PROGRAMS

(A SWOT of the deptt. Of Entomology, The Islamia University of Bahawalpur)

STRENGTHS

- Shifting of College buildings site in Master Plan at suitable and accessible place.
- Field and low cost tunnel facilities at agriculture farm for on farm research
- Hiring of available qualified faculty with Ph.Ds in entomology
- Easy accessibility and opportunity at entomological research area
- Out of 4 faculty members 2 hold foreign Ph.D, 1 hold Post-doc. degree and remaining 2 are abroad for Ph.D. study. They have expertise in different fields of entomology (Toxicology, biological control, Insect behaviour and Neurobiology and IPM)
- Sufficient land for on-farm research is available both for faculty and students.

WEAKNESS

There are certain areas regarding faculty, equipment and manpower which needs further improvements.

- Shortage of the senior faculty
- Lack of supporting staff for the department
- Limited laboratory, class rooms and faculty offices
- Shortage of recurring budget for conducting research and maintenance of laboratories
- The program lacks basic and modern research equipments.
- There is no departmental library.
- Lack of green house/Insectary facility
- Allocation of separate budget for Entomology department
- Lack of supporting staff for the department
- Availability of limited numbers of the books in main library.

OPPORTUNITIES

- Opportunities for increasing faculty members and provision of training newly appointed faculty members.
- Bright chance of Scholarships for Post-doc. and promotion of faculty members to higher vacant positions.
- Making arrangement for getting the laboratories support staff trained
- Graduates of this department compete well for government and private jobs especially in urban and rural areas of Punjab.
- Awareness creating both for farmers and local community in pest management
- Opportunities to develop well equipped laboratories

THREATS

- Intake of the students is decreased due to limited facilities
- Lack of coordination with other universities.
- Insufficient rooms for laboratories and offices
- Lack of well equipped Research Laboratory
- Decline in quality and standard of research due to inadequate facilities in laboratories

4. ACTIONABLE RECOMMENDATIONS

- There is an immediate need to strengthen the department with senior faculty, laboratories and library.
- The department need a strengthen project for its infrastructure from HEC.
- The department needs equipments like Micropipettes, PH Meter, UV Visible spectro-photo meter, Thermal cycle, Real time PCR, Fume hood, camera-fixed stereomicroscope, high magnification stereomicroscope, drying cabinets, ovens, cool incubators, desiccators, electrophoresis, high speed centrifuge and growth chambers.
- A green house and insectary is required for research at post-graduate level.
- The faculty needs training in modern molecular and biotechnological areas.
- The capacity of young faculty members may be enhanced through short term and long term training abroad.
- Need for establishment of separate entomology laboratories such as Insect Molecular Lab, Stored Grain Management Lab, IPM lab, Bio-control Lab.
- Establishment of Apiculture and Butterfly house will increase the practical knowledge of the students.
- Faculty should be provided fresh computers facilities
- Department must have separate supporting staff and Training Lab. staff
- Establishment of Departmental library and increased budged for purchasing books
- Post-graduate research should be expanded to molecular and bio-technological level.
- Funds should be arranged for faculty members to regularly participate in conferences, seminar and workshops at national and international level.

Signature: _____

Name: Prof. Dr. Muhammad Naeem
 Chairman, Department of Entomology
 PMAS-Arid Agriculture University, Rawalpindi

Evaluation Criteria for Agricultural Degree Programs

Sr No	Criteria	Points Assigned	Points Awarded
Major Criteria			M.Sc.(Hons.) & B.Sc.(Hons.)
1	Strength and Quality of Faculty	250	157
2	Curriculum Design and Development	150	102
3	Infrastructure and Learning Resources	200	99
4	Students Support and Progression	100	74
Sub-Total (a):		700	432
Minor Criteria			
5	Research and Consultancy Activities	150	65
6	Governance and Leadership	100	62
7	Recent Innovations and Best Practices	50	40
Sub-Total (b):		300	167
Grand Total (a+b):		1000	599

Prof. Dr. M. Naeem

Name and Designation

Signature of Program Evaluator

Final Recommendation

- The team unanimously declared the Department of Entomology, University College of Agriculture and Environmental Sciences, The Islamia University of Bahawalpur, Pakistan in the “ Y1” category of National Agriculture Education Accreditation Council.

1. **Prof. Dr. Muhammad Naeem** (Convener) _____

Chairman, Department of Entomology

PMAS-Arid Agriculture University,

Rawalpindi

2. **Dr. Muhammad Razzaq** (Member) _____

Chairman,

Department of Entomology,

University College of Agriculture,

BZU, Multan

I agree with the observations and recommendations made by the peer team in this report.

Chairman Department of Entomology.

Annex -1

- **Area of specialization and sections/labs in the department**

Faculty	Faculty with Ph.D. Degree	Specialization	Status	
			Regular	Contract
Dr. Javaid Iqbal	PhD (Germany), PostDoc (France)	Insect behaviour and physiology, IPM	Regular	
Dr. Muhammad Waqar Hassan	PhD (China)	Insect Ecology and Toxicology	TTS	
Ms. Bushra Siddique	MSc (Hons.) Entomology	Integrated Pest Management (IPM)	Regular (Study leave for PhD)	
Ahmed Manan Mustafa	MSc (Hons.) Entomology	IPM and Biocontrol	Regular (FDP) (Study leave for PhD)	
Muhammad Jamsheed	MSc (Hons.) Entomology	Entomology		Visiting
Ms. Riffat Yasmin	MSc (Hons.) Entomology	Entomology		Visiting
Muhammad Zeeshan	BSc (Hons.) Entomology	Entomology		Visiting

Annex-2

- : Area of specialization and sections/labs in the department**

S.#	Laboratory	Laboratory Assistant	Laboratory Attendant	Required
1	Entomology	Mr. Liaqat Ali -	1	3 lab. Assistant 3 Lab. Attendant

