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## INTRODUCTION

BASIS was established in 1978, with government approval, to develop standards for pesticide storage, transport and the advice given to farmers and growers.

The BASIS Certificate in Crop Protection was enshrined in the law when the Food & Environment Protection Act (FEPA) was drafted in 1985. The Control of Pesticide Regulations (COPR) 1986 made it compulsory for all those involved in the sale and supply of professional pesticides to be appropriately certificated with a qualification recognised by ministers (BASIS Certificate in Crop Protection). These are all laid down clearly in the Approved Code of Practice for Suppliers of Pesticides to Agriculture, Horticulture and Forestry (Yellow Code).

In 1992 BASIS began to set standards for examination and certification for the Fertiliser Industry with the advent of FACTS and this is now recognised as the industry standard for those giving advice on the use of fertilisers and crop nutrient requirements.

More recently the emphasis has changed and farmers are now encouraged to consider the environment, biodiversity in the countryside and an integrated approach to farming.

The BETA (Biodiversity and Environmental Training for Advisers) qualification includes elements of all these things and has also now been recognised as an industry standard for advisers who need to help farmers and growers comply with ELS and cross compliance requirements.

The interest by government, environmentalists and NGO's in soil erosion management and water pollution issues has widened the training requirement for advisers once again. The BASIS Soil & Water Management Certificate can give advisers the knowledge required to enable them to help farmers with the plethora of information about soils and the development of soil management planning.

The BASIS Diploma in Agronomy is an aspirational qualification for advisers who have continued to broaden their expertise and have gained a number of BASIS qualifications in recent years. The BASIS Diploma is designed to give recognition to those people without the need for any additional examinations or training.

Finally, there is a need for farm managers and supervisors in agriculture; contract specifiers, supervisors and managers of contract spraying operations in the amenity sector, to have a formal qualification and to show a degree of competence in pesticide operations.

The Basis Foundation Awards for either Agriculture and Horticulture or Amenity are designed to give a sound introduction to agronomy, integrated crop protection and crop nutrition.

The Environmental Pesticide Management (Amenity) certificate (formerly POWER) is designed to help those who have responsibility for the application of pesticides in amenity areas. It has been put together specifically to address water protection and environmental issues in this sector.

The protection of water and the environment, protection of biodiversity and prevention of contamination with pesticides is a key aim, not only for this qualification but for the amenity industry.

For further details please visit our website [www.basis-reg.com](http://www.basis-reg.com) to download course syllabuses and details of training providers. You can also contact the training department on 01335 340857 or by email on [training.courses@basis-reg.co.uk](mailto:training.courses@basis-reg.co.uk).

## **BASIS CERTIFICATE IN CROP PROTECTION SYLLABUS & INFORMATION**

The BASIS Certificate in Crop Protection has been established since 1978 to provide training and certification for sellers and suppliers of agrochemicals and those giving advice on their use.

In 1985 the Food & Environment Protection Act (FEPA) made certification a statutory obligation for pesticide sellers and suppliers.

“No person shall sell, supply or otherwise market to the end-user a pesticide approved for agricultural use unless he has obtained a certificate of competence recognised by the Ministers, or he sells or supplies that pesticide under the direct supervision of a person who holds such a certificate”

The BASIS Certificates in Crop Protection have been approved by Ministers to meet the requirements of Schedule 2 of FEPA for certification for those involved in sale and supply of pesticides.

The syllabus and information booklet is designed to help those involved with training people to meet this standard and provide guidelines to the subject areas which need to be covered to enable them to achieve a satisfactory level of competence.

It is essential that candidates understand the need for a practical approach to training because in order to be successful, individuals must be able to give sound technical advice in the field. Obviously some of the training will be of a theoretical nature but both the syllabus and training programme should be interpreted to provide practical instruction wherever possible.

All staff employed in the (field) sales of agrochemicals and/or giving advice on their use must, under the Control of Pesticides (Amendment) Regulations 1997, have obtained a Certificate of Competence or exemption from it within three years of entering the Crop Protection industry. New staff to the industry will be allowed a period of three years in which to qualify, during which they will be working under the supervision of a qualified member of staff.

People holding the full Certificate in Crop Protection in either agriculture, commercial horticulture or field vegetables do not require further certification to cover activities in amenity horticulture, grassland & forage crops, potatoes, aquatics, seed treatment, floriculture or forestry. However, those who hold certificates relating to these activities are qualified only in that specific area and not in general agriculture or commercial horticulture. The seed treatment certification also covers sellers of treated seed.

Candidates must have had satisfactory training and supervised field experience before entering for the BASIS examinations. If in doubt as to this requirement, please contact the BASIS office. Candidates who are ill-prepared for the examination obviously represent a waste of time and money to their employer and a waste of time to the examination panel, who give freely of their services. Remember, new entrants to the industry are given up to three years working under supervision before being required to hold the BASIS Certificate in Crop Protection.

Courses are offered for the BASIS Certificate in Crop Protection by the BASIS Approved Trainers listed in this booklet. Courses are run as either day release or in blocks of a week at a time; please contact the trainer of your choice for details.

## **COURSES LEADING TO THE BASIS CERTIFICATE IN CROP PROTECTION**

### **AGRICULTURE**

The BASIS Certificate in Crop Protection – Agriculture includes cereals, oilseeds, legumes (peas and beans) potatoes, sugar beet, maize, grassland and is intended to cover (in principle) all other arable and non arable situations.

Particular emphasis should be placed on crops which are locally grown but candidates may be examined on all other arable crops. The crops will be used as a vehicle on which to put across the basic principles of crop protection. Course duration is up to 35 days but will depend on the knowledge and experience of the candidates.

### **COMMERCIAL HORTICULTURE**

The commercial horticulture industry is seen as including glasshouse edible crops, flowers and bedding plants, fruit crops, vegetable crops and nursery stock. The above crops will be used as a vehicle on which to put across the basic principles of crop protection.

Course duration is up to 35 days but will depend on the knowledge and experience of the candidates. Courses are run as either day release or in blocks of a week at a time; you will need to contact the trainer of your choice for details.

### **FIELD VEGETABLES**

The field vegetable industry is seen as including carrots and parsnips, brassicas, onions, legumes, potatoes and other similar crops. Course duration is up to 35 days but will depend on the knowledge and experience of the candidates. Courses are again run as either day release or in blocks of a week at a time; you will need to contact the trainer of your choice for details.

### **AMENITY HORTICULTURE**

The amenity horticulture industry is seen as including hard surface weed control, control of weeds, pests and diseases of turf and similar crop protection issues for shrubs and glasshouse plants. Course duration is up to 17 days and will depend on the knowledge and experience of the candidates. Courses are run as either day release or in blocks of a week at a time; you will need to contact the trainer of your choice for details.

### **GRASSLAND AND FORAGE CROPS**

Grassland and Forage includes short, medium and long term leys, permanent pasture and various crops grown for forage, including maize, peas, vetches, forage brassicas and cereals grown for silage. The above crops will be used as examples with which to put across the basic principles of crop protection. Course duration is up to 15 days and may be run as either day release or in blocks of a week at a time; you will need to contact the trainer of your choice for details.

## **AQUATICS**

The aquatics industry is seen as including application of pesticides in or near water and will be mainly concerned with aquatic weeds and their control. Courses are run as either day release or in blocks of a week at a time; you will need to contact the trainer of your choice for details. Course duration is up to 10 days but will depend on the knowledge and experience of the candidates.

## **EA HERBICIDE AGREEMENT OFFICER TRAINING**

This course is specifically designed for the Environment Agency to provide training and accreditation for EA Officers involved with granting consents for spraying pesticides 'in or near' water.

## **ARBORICULTURE AND FORESTRY**

The forestry industry is seen as including the use of crop protection materials in both mature forests / woods and nursery growth of young and developing trees. Course duration is up to 15 days.

## **FLORICULTURE**

The BASIS Certificate in Crop Protection – Floriculture is seen as including cut flowers, flowering pot plants and bedding plants. Growing situations include under glass, under plastic, other forms of protected cropping, as well as outdoor flower production. The following crops will be used to illustrate the basic principles of crop protection in flower production: roses, carnations, chrysanthemums, lilies, alstroemeria, flowering pot plants (poinsettia, chrysanthemum) narcissus (including bulbs) and tulip. There are a number of other flower types which may be grown and the syllabus does not exclude any which are not specifically listed. Courses may be run as either day release or in blocks of a week at a time; you will need to contact the trainer of your choice for details. Course duration is up to 15 days, but will depend on the knowledge and experience of the candidates.

## **SEED TREATMENT**

BASIS certificates have been recognised by Ministers as meeting the requirements of a Certificate of Competence for seed treatment advisers and sellers of seed treatment chemicals, as identified in the statutory "Code of Practice for suppliers of pesticides to agriculture, horticulture and forestry" (ref. PB3529).

Sellers of seed treatment chemicals require a Certificate of Competence under Schedule 2, of the Control of Pesticides (Amendment) Regulations 1997. Ministers also consider it desirable that advisers on seed treatment should be suitably qualified. Course duration is up to 7 days but will depend on the knowledge and experience of the candidates.

## **SEED SELLERS**

The BASIS Seed Sellers Certificate is designed for those who sell treated seed. The course covers the knowledge required for those who interface with farmers and / or seed buying contracts, to be competent and confident in advising seed treatments for different crops and seed varieties.

The course will suit those already selling seed and those who intend to sell seed providing they have prior knowledge of farming practices. The course, and the ensuing certificate, do not qualify the candidate to give the full in-field crop protection advice needed once treated seed is sown. The syllabus does however cover knowledge of the principles of other parts of a full crop protection programme. Course duration is 3 days including the examination.

Staff who already hold a BASIS Certificate of Competence in Crop Protection are not required to hold the seed sellers' certification separately as they are automatically exempt. Those who do not hold either the normal BASIS Certificate or exemption should be certificated to meet the requirement of the initiative within three years of entering the industry.

## **STORED COMBINABLE CROPS**

The BASIS Certificate in Crop Protection (Stored Combinable Crops) is intended for those who will only sell, and/or give advice, on the use of pesticides that are used in stored combinable crops, or used for the treatment of the fabric of combinable crops storage buildings. It does not cover sales of, or advice regarding, pesticides used in growing crops. Anyone who will sell or advise on pesticides used in the field must obtain the broader BASIS Certificate in Crop Protection (Agriculture, Commercial Horticulture or Vegetables).

## **STORED POTATOES**

A similar course to that for Stored Combinable Crops is being designed for those involved with stored potatoes. This will cover all aspects of potato storage including climate control, fogging and storage diseases. More information will be available shortly.

## **BASIS PLANT PROTECTION AWARD**

In the 1980's, the examination known as the BAA (Part III) Certificate in Crop Protection formed the baseline for crop protection product manufacturer field staff. In 1997 the Certificate was merged with the Pesticide Technology Module of the Advanced BASIS Certificate to create the Plant Protection Award. (Note: For BAA/CPA members the exam either as the original BAA certificate and more recently as the Plant Protection Award has fulfilled the CPA's Part III training requirement for manufacturers staff who regularly give advice).

The primary content of the Plant Protection Award is concentrated on:- Plant Protection and its implementation in agricultural systems and society; Formulations; Modes of Action; Application and Health and Safety. In essence, it covers Plant Protection Technology and it is therefore a most important part of the future industry knowledge and skill requirement.

### **Are there any exemptions?**

Yes, people who hold the Crop Protection Association Part III by examination will be exempt from the BASIS Plant Protection Award (including BAA Part III).

## **BIODIVERSITY AND ENVIRONMENTAL TRAINING FOR ADVISERS (BETA)**

British agriculture has consistently demonstrated its' willingness to change and to adopt new technology. This open approach to such a fundamental and traditional industry is principally responsible for the plentiful supplies of safe, wholesome food we all enjoy.

Yields of crops have, in the past, increased year on year and have kept pace with the growth in population. However, such significant progress does not come without some related issues. Modern farming techniques not only produce superb crops but also exert pressures on the natural balance of the environment and its biodiversity.

The beauty of the British countryside is no accident. It is achieved by the care and stewardship of farmers as the custodians of their land. However, pressures on the environment are constantly changing and evolving.

The introduction of CPMP's (Crop Protection Management Plans) and NRoSO (National Register of Spray Operators) both aimed to increase awareness and to improve the management skills of farmers and spray operators respectively. They have both had an effect on the impact of farming in the countryside and its biodiversity.

The BETA (Biodiversity and Environmental Training for Advisers) training syllabus aims to progress the knowledge and skills of on-farm advisers in those important aspects related to Crop Protection use and inform that advice to farmers.

The syllabus is a result of co-operation amongst a number of organisations as it has developed, with involvement from FWAG, HAUC, AIC (formerly UKASTA), ARET and others. Their assistance is appreciated and it has enabled the Crop Protection Association and BASIS® (Registration) Ltd. To co-ordinate the four modules of this syllabus together. The BETA qualification is part of the Voluntary Initiative (VI)

package of measures which were presented to, and agreed by, government through a representative group of UK industry bodies, as a practical alternative to the introduction of a pesticide tax.

The BETA modular training programme aims to promote the protection and enhancement of biodiversity, in the context of best practice of crop protection use on farm and the sustainability of profitable farming. The combination of Integrated Crop Management with Crop Protection Management plans and biodiversity training, puts together a wider package which leads to more holistic Integrated Farm Management support.

## **BASIS CERTIFICATE IN CONSERVATION MANAGEMENT**

Farming in the UK is familiar with change – new crop varieties, new techniques, machinery innovation and many other aspects are accepted as part of every day agricultural business life. Occasionally the degree of change is on a larger scale and wider-in-scope, so that all farmers are affected.

The move away from production subsidy to reward for countryside management is having an effect on all involved and the way that farming is practised. The Single Payment Scheme has initiated an enormous volume of booklets, papers, predictions, pamphlets and guidance literature covering all that is required of farmers to comply with Cross Compliance, Statutory Management Requirements, Good Agricultural and Environmental Condition, as well as for the Entry Level and Higher Level Stewardship Schemes.

It is of no surprise that many farmers are finding it difficult to comprehend the scale of what is required and the depth of knowledge needed to comply with the requirements of Environmental Stewardship Schemes. Most farmers are excellent production managers but there is now a change of emphasis and a move towards countryside management.

This short training course is designed for those who have agricultural knowledge but may not be fully familiar with all that is required by the Single Farm Payment Scheme (SPS), relative to Conservation and Environmental issues. Conservation Management needs care and attention on farm, to soil, air, water, wildlife, the environment and farmland biodiversity. The course is ideally suited to those managing farms, both directly and indirectly as land agents or management consultants. Any one involved in Estate Management on a broader scale would also benefit. The four modules of the course will help to increase the knowledge of those attending and contribute to improvements in farmland biodiversity and conservation.

There are no pre-course entry requirements, although the greatest benefit will be gained by those who understand farming and who have some experience of how farms and farmland are managed. Ideally a year working on a farm or a job involved with farming would provide the minimum pre-course background experience and knowledge.

Those with an agricultural qualification would find this a benefit.

- It is possible to sit the Conservation Management examination without any formal training. However, this is not advised because of the wide scope of the course.
- Successful candidates will achieve the BASIS Certificate in Conservation Management.
- The course comprises four modules:
- Soil and Air Protection
  - Protection of Surface and Ground Water
  - Biodiversity – Conservation and Improvement
  - Care of the Environment
- All modules will relate to the Single Farm Payment Scheme (SFPS) and to on-farm requirements for the management of each module content.
- Tuition for the course will usually be 2½ days, with the examination being on the afternoon of the third day, making 3 days duration in total. However, for more experienced practitioners it may be possible to reduce the total time involved and to recognise greater knowledge and experience prior to the course tuition.

## SOIL & WATER MANAGEMENT CERTIFICATE

Soil and water are two essential components of agriculture. The management of these two vital resources is at the centre of farming activity. Both elements are under pressure from modern living and current farming practice.

The development of roads, houses and other buildings has encroached on the countryside putting pressure on water / drainage management to reduce flooding risk. The changes to cropping practice with more cereals, more oil seed rape and more forage maize, as just 3 examples, have exerted their own dynamics on the way that soil and water are managed on the farm. The power and capability of today's tractors and equipment means that soil can be cultivated and seedbeds produced where previously it would have been difficult or impossible to do so. That facility is of enormous help to farmers, but it can also lead us away from the best practice in soil management.

The creation of larger fields over the last 50 years has also changed drainage patterns and in some cases filling in ditches and hedge removal have taken away natural borders to areas previously contoured to minimize erosion or recognise soil type changes. All these issues encourage the careful and considered use of the two vital resources of soil and water, a most important element of on-farm agronomy advice. As the agricultural industry moves to a more environmentally conscious approach, the focus of advice is changing and the "food at all costs" type of management will not be, in the current way of thinking, the way for the future.

The primary content of the Soil & Water Management Certificate is concentrated on: soil and air protection; cultivation techniques and systems; erosion risks; soil water, drainage and irrigation; plant nutrient and fertiliser planning; the use of bulky organic materials to enhance crop growth and their effects on diffuse pollution.

The syllabus contents above link together to form the composite soil and water management certificate.

## **BASIS ADVANCED CROP MODULES**

Each Advanced Crop Module is awarded after the successful completion of a short training course.

Candidates can either use these modules for updating or as part of the BASIS Diploma in Agronomy.

### **Advanced modules are available as follows:**

Amenity Horticulture	Cereals
Field Vegetable Crops	Grassland
Legumes and Oilseeds	Nursery Stock
Potatoes	Protected Crops
Seed Production and Seed Technology	Sugar Beet
Soft Fruit	Top Fruit and Hops

### **BRIEF SYNOPSIS OF MODULES AVAILABLE FOR THE ADVANCED CERTIFICATE**

#### **AMENITY HORTICULTURE**

This module is aimed to give an insight into the amenity horticulture area, covering the topics of turf production, maintenance and management, maintenance of road and motorway verges, gardens and parks (but not amateur properties), forest areas, dry and aquatic areas and the maintenance of industrial sites.

The growth, establishment, crop protection, fertiliser requirements, selection of seed mixtures and maintenance and management procedures will be discussed and reviewed in depth.

The module will be of particular benefit for those advisers and representatives who wish to improve their in-depth knowledge of amenity horticulture; it will prove particularly valuable to staff who are already experienced in other areas but wish to diversify their specialist subject within the wider topic of Amenity Horticulture.

#### **CEREALS**

Optimising cereal yields and achieving market requirements for grain quality increasingly demands close attention to the detail of crop management.

The Cereals module will develop a detailed understanding of the requirements for improving crop management and profitable grain production. Decision-making will be stressed in the participative training for improving, in particular, cereal crop protection. To allow crop study at different times during the growing season, the module will be split into three 2-day sessions taking place in autumn, spring and summer.

Participants will study:

- Planning and crop preparation
- Field trials and farmer advice
- Crop growth and development
- Harvest and storage
- Crop management
- Marketing and grain quality

## **FIELD VEGETABLE CROPS**

The module deals with the production of what are potentially high output crops, grown in rotation with the more widespread arable crops of Britain. Demand for the produce is volatile and the quality standards imposed by the market, and by statutory bodies, are very stringent.

Crop protection of vegetable crops is beset by many problems. Complicated cropping patterns require close integration of crop protection measures with all other agronomic production techniques. The total area of each crop is small, relative to other arable crops, so that there are comparatively few agrochemicals registered solely for each one. Residue levels have to conform to very tight limits and the need to store a high proportion of output adds another dimension to producers' problems.

The module deals with the problems and possibilities of growing a range of vegetable crops and integrating into mixed crop rotation. It will give participants a good grounding in the growing, harvesting and storage programmes involved in this complicated, continually changing business.

## **GRASSLAND**

Crop protection measures in arable crops need to be judged against many aspects of crop growth before financial efficiency can be ensured. In grassland the situation is even more complex. This crop is harvested several times a year, the level of production aimed at may, for valid reasons, be high, medium or low and the crop itself is usually valueless until it has been processed by the animal.

This module covers all aspects of producing and conserving grassland crops for animal feed and shows how to measure its success in terms of what use the animal makes of it. The place of crop protection is described, not only in controlling weeds, pests and diseases, but in ensuring that silage is of good quality.

There are still many farms where grass is a pivotal crop in ensuring the success of subsequent arable cropping. It is important to understand how the soil changes under grass before one can appreciate the longer term effects produced.

General agronomists will gain from this module a sufficient understanding of grassland to allow them to discuss confidently with any farmer the production, conservation and feed value of Britain's most important crop.

## **LEGUMES & OILSEEDS**

This module is intended to give a detailed insight into the husbandry, harvesting and marketing of legume and oilseed crops grown in the UK, EU and in a world context. The growth, crop protection, fertiliser requirements, selection of seed, establishment, harvest and storage methods will be discussed and reviewed in depth.

The module will be of particular benefit to those advisers and representatives who wish to improve their in-depth knowledge of these crops.

## **NURSERY STOCK**

Quality plant material is the hallmark of a successful nursery stock industry. The recognition of factors affecting quality in both containerised and field grown nursery stock is essential in this rapidly expanding industry. Knowledge of production cycles, domestic and European trends in the industry and marketing strategies are key areas of knowledge needed by advisers to be effective in this specialised crop production system.

Comprehensive, up-to-date information on all aspects of nursery stock production will ensure the industry continues to develop, expand and compete successfully with our European competitors.

## **POTATOES**

This module is aimed to give a detailed insight into the husbandry and marketing of potato crops grown in the UK. The potato crop market will be discussed in the context of seed, ware, earlies and processing, within a UK, EU and world context.

The growth, crop protection, fertiliser requirements, selection of seed, establishment, harvest and storage methods will be discussed and reviewed in depth.

The module will be of particular benefit to those advisers and representatives who wish to improve their in-depth knowledge of the potato crop.

## **PROTECTED CROPS**

Participants will be updated in modern Protected Crop production techniques, with particular emphasis on crop nutrition, environmental control and integrated pest management.

Through individual project work, specifically selected visits and varied teaching techniques, the successful participants will be better equipped to effectively advise growers on appropriate and cost effective control measures for protected crop problems.

## **SEED PRODUCTION & SEED TECHNOLOGY**

The quality and health of seed is critical to crop production and modern seed treatment technology can protect both seed and seedlings from many serious pest and disease problems. The genetic potential of new crop varieties can only be fully exploited by farmers if seed crops have previously been produced under stringent conditions and if the seed is subsequently harvested, stored and treated in an appropriate manner.

The primary aim of the Seed Production and Seed Technology module is to provide updating and to develop an improved understanding of both seed production systems and seed treatments. The programme will focus on advances in the growing of cereal, herbage, brassica, pulse and sugarbeet seed crops and seed treatments.

Participants will consider:

Seed biology	Seed storage and treatment equipment
Seed production	Seed treatments
Seed crop mechanisation	Environmental issues

## **SUGAR BEET**

Over the past few years there have been major advances in sugar beet production and yields continue to increase. Not only do we see changes in the armoury of chemicals available to assist in crop protection but we also see new techniques develop for growing the crop.

This module aims not only to offer a chemical update for those giving advice and making recommendations for sugar beet growers but it also aims to give a clear picture of the techniques involved in the production of a modern sugar beet crop.

As a result of studying this module it is intended that the participant will have developed a detailed understanding of all aspects of the sugar beet crop including financial details and marketing.

## **SOFT FRUIT**

Participants will be updated in modern production techniques for soft fruit with particular emphasis on soft fruit culture, effects of the environment on growth and development, the causal agents of crop damage and crop protection.

Through specifically selected visits and varied teaching techniques, the successful participants will be better equipped to effectively advise growers on appropriate and cost effective control measures in soft fruit.

## **TOP FRUIT AND HOPS**

Participants will be updated in modern production techniques for top fruit and hops, with particular emphasis on tree culture, effects of the environment on growth and development and the control of weeds, pests and diseases, including IPM techniques.

Through individual project work, specifically selected visits and varied teaching methods, the successful participants will be better equipped to effectively advise growers on appropriate and cost effective control measures for problems in top fruit and hops.

## **NUTRIENT MANAGEMENT PLANNING MODULE**

To prepare FACTS Qualified Advisers (FQAs) to manage the challenges of the Water Framework Directive (its associated initiatives and regulations), greenhouse gas mitigation strategies and soil protection, while also improving farm profitability, industry leaders have urged the FACTS Committee to introduce this topic of Nutrient Management Planning as core CPD training.

Nutrient Management Planning is compulsory for all current FACTS Qualified Advisers (FAQ's) and those gaining the qualification prior to 31st December 2009. We expect that over 3000 people will require training for the 6 modules by the end December 2014. Only those who have attended the Train the Trainer Events and taken the Nutrient Management Planning Exam are able to offer the training. The modules and CPD points will NOT be awarded to anyone who submits evidence of training with a trainer who has not gained the NMP Qualification.

FAQ's now have recognised roles in implementing NVZ rules, the Code of Good Agricultural Practice and are recognised by crop assurance schemes. FACTS membership will benefit individuals if this recognition is maintained and extended and, to this end, the FACTS Management Committee has agreed the need for some on-going training.

A new Nutrient Management Planning course, comprising six modules, has been developed and is now available to FQA's. Current members will need to complete this course training by December 2014 if they are to retain their FQA status beyond 2014. The same arrangement will apply to subsequent five-year periods.

## **FACTS**

### **FERTILISER ADVISERS CERTIFICATION AND TRAINING SCHEME INTRODUCTION**

FACTS is an independent non-statutory certification Scheme for advisers and sellers within the fertiliser industry. It was established in 1993 following discussions with the trade associations connected with the industry and BASIS® (Registration) Ltd. At the present time there is no legal requirement for advisers and sellers to be certificated; however it was considered that setting up such a scheme was the responsible action to take in light of the environmental pressures on the industry and increasing technical requirements. The Scheme and initiative are fully supported by Defra, the EA and other agencies. FACTS Qualified Advisers (FQA) are officially recognised in literature such as the Fertiliser Handbook (RB209) and in crop assurance protocols.

#### **FACTS (Horticulture)**

Advisers and those selling fertiliser into the Commercial Horticulture industry may be more concerned with hydroponics and supply of nutrients to protected crops than solid fertiliser on a field scale but nevertheless the basic principles of nutrient management are key requirements for on farm advisers.

#### **FACTS (Vegetables)**

Advisers and those selling fertiliser to vegetable growers either on a field scale or under protection are also subject to similar considerations.

This course uses specific vegetable crop examples to illustrate the basic principles of nutrient management.

#### **FACTS (Golf and Sports Turf)**

Advisers and those giving fertiliser and plant nutritional advice to people managing turfgrass, having due regard for the protection of the environment, including what the law requires of them in these matters.

# **GUARDIAN**

## **BASIS CERTIFICATE IN GARDEN CARE**

### **(FOR THE ADVISER AND SELLER OF GARDEN PRODUCTS)**

The use of chemicals of various types in the garden and around the home are part of everyday life. We look to chemicals to assist us with a wide range of home based tasks from weed, pest and plant disease control in the garden; nutrition for the plants we grow; the control of vermin; the control of pests and diseases in wooden structures (sheds, fences, greenhouses.), etc. All of those uses of different types of chemicals mean that a very wide array of products confronts the public when they visit their local DIY store or garden centre to buy solutions for the problems they have at home. The better stores and centres give advice to the public on product choice and, importantly, where or when not to use it. Every one of us has a responsibility to help in the care of the environment in which we live and the protection of essential water supplies. The correct use of available chemical products can greatly enhance our homes and our gardens, without being detrimental to the natural environment or contaminating the water which flows down our drains and soaks down through our garden soil.

The GUARDIAN training and the BASIS Certificate in Garden Care are designed to meet the provision of advice for all relevant home and garden use products. The staff of a wide range of businesses, supplying the public with products for home and garden use, are the focus for the GUARDIAN Course.

Typically staff working in

- DIY Stores
- Garden Centres
- Hardware Stores
- Garden Design Centres
- Supermarkets with home / garden sections
- General Stores with home / garden departments
- Landscape and garden service businesses
- Other retail outlets of home and garden products

All the staff serving the public and having responsibility for the types of products mentioned above will find the Guardian training of great value. The aim is that staff will be more confident in selling and giving sound advice on garden chemicals, to the public.

## **BASIS FOUNDATION AWARD IN AGRONOMY (AGRICULTURE) BASIS FOUNDATION AWARD IN AGRONOMY (VEGETABLES)**

The course is a sound introduction to agronomy, integrated crop protection and crop nutrition.

For some delegates with limited crop experience and knowledge it serves as a preliminary course for the BASIS Certificate in Crop Protection (Agriculture or Vegetables) Course.

For others, who have a role which will not involve giving agronomy and crop protection advice, it is a stand alone course providing them with a level of understanding and knowledge appropriate for their work. This is a diverse group including some farm staff, quality assurance officers, machinery manufacturer personnel and others.

The qualification, awarded to those successful in the examination, would be of particular value to those for whom this may be an end point in agronomy training. It would also serve to encourage those considering progression to other courses such as the BASIS Certificate in Crop Protection and FACTS.

The course duration is between four and six days which are ideally spread over the calendar year so that farm crops can be seen at different stages. Participatory training techniques are to be used throughout.

## **WILDLIFE AWARE**

The “Wildlife Aware” training course is provided by the Campaign for Responsible Rodenticide Use (CRRU) in collaboration with BASIS. The course is NOT a course on basic rodent control. Those who attend the course are expected to possess proficiency through prior training in rodent pest management and to have attended relevant training courses such as those offered by the British Pest Control Association and the City and Guilds NPTC.

The use of rodenticides is essential to many rural enterprises. Rodenticide use is important in the maintenance of good husbandry and the protection of human and animal health and for the prevention of spoilage of foodstuffs due to contamination by rodent pests. The use of rodenticides is increasing, both because there is evidence that rodent populations are themselves increasing and because many agricultural audit schemes now insist on structured rodent pest management procedures in all facilities audited under the scheme.

However, there is growing evidence of widespread contamination of wildlife with anticoagulant rodenticides. Many of the species involved are of high conservation status, such as the barn owl, kestrel and red kite. The effects of the low-level residues commonly found are unknown, though there is currently no evidence that these residues are having an adverse effect on any wildlife populations. Nevertheless, these residues are worrying, unwanted and are largely unnecessary if fundamental guidelines are followed during the application of rodenticides in the countryside.

The “Wildlife Aware” course will explore these apparently conflicting requirements. The course will increase understanding of current levels of contamination of wildlife by rodenticides, explain the main primary and secondary routes of exposure of wildlife to rodenticides and alert competent professionals to the techniques that should be adopted to minimise wildlife exposure during rodent pest management in rural settings. This advice is based in the Code of Practice for Responsible Rodenticides Use known as the CRRU Code.

## **INTEGRATED CROP MANAGEMENT COURSE**

The implementation of Integrated Crop Management (ICM) is a progressive step towards developing a system that truly addresses the concerns of consumers, environmentalists and farmers - a system that can produce quality food with sensitivity for the environment, whilst maintaining a financially profitable business for farmers.

Building on the Codes of Good Agricultural Practice, ICM is a whole farm approach that is practical and achievable for farmers, acceptable in the eyes of the consumer and is a key option for government for the responsible use of pesticides in the UK and throughout Europe. Furthermore ICM provides a sound basis for the development of farm assurance schemes.

IPM is an important focus for new European legislation outlined within the Sustainable Use Directive (SUD) and its definition is essentially ICM as practiced by UK farmers and agronomists.

The BASIS/LEAF ICM course has been designed to provide an insight into ICM for anyone who is involved, directly or indirectly, in food production. The course has been developed to ensure a common standard for ICM understanding and uptake through promotion and advice. The course does not qualify the individual to be BASIS or FACTS certificated but it plays a fundamental part in the development of any adviser and in future it will be important to demonstrate knowledge and competence of ICM.

ICM is a common sense approach to farming. It combines the best of traditional methods with appropriate modern technology, balancing the economic production of crops with positive environmental management.

The fundamental approach of IFM is that of informed management across the whole farm, which focuses on attention to detail in all practices and includes what we all understand to be ICM and IPM.

It is also dynamic in that it can be adapted to incorporate new concepts as they are perfected. Precision farming methods which are being developed will almost certainly be compatible and consistent with Integrated systems.

## YOUR QUESTIONS ANSWERED

- **DO I NEED TO TAKE A TRAINING COURSE IN ORDER TO SIT A BASIS EXAMINATION?**

Not necessarily, if you feel you already have enough technical knowledge and in-field experience. However, candidates should ensure that they have been trained satisfactorily, either in-house or externally, and have had sufficient supervised field experience prior to the examination, so that they are capable of giving clear, concise advice and recommendations to farmers and growers.

- **WHAT FORM DO THE TRAINING COURSES TAKE?**

**BASIS Certificate in Crop Protection:** That will depend on the trainer / training provider, the chosen course and on previous experience to date. Courses can run for up to a total of 35 days for the full Certificate in Crop Protection in Agriculture / Commercial Horticulture or Field Vegetables. This will be split up into blocks of a week at a time or perhaps day release.

**FACTS:** Normally a one-week residential block (5 days) with an assessment on completion of the course. Day release or short blocks may be offered depending on regional requirements.

Other BASIS courses are of shorter duration as detailed in individual syllabus and information booklets.

- **WHERE ARE TRAINING COURSES HELD?**

Details of trainers and locality can be found in the appropriate syllabus and information booklets.

- **HOW DO I APPLY TO TAKE A TRAINING COURSE?**

Contact the Training Provider of your choice and complete a training course application form. Send your application to your chosen training provider (**not** to BASIS).

- **IS IT POSSIBLE TO OBTAIN THE QUALIFICATION THROUGH CORRESPONDENCE OR EVENING CLASSES?**

A distance learning course is available for overseas candidates for some courses, though not at the moment for those in the UK.

- **WHEN AND WHERE ARE EXAMINATIONS HELD?**

Examinations are held when there are sufficient numbers to make them viable, usually following a training course and at a venue chosen by the training provider.

- **WHAT READING MATERIALS WILL I NEED?**

Contact the BASIS office or visit our website [www.basis-reg.com](http://www.basis-reg.com) for the appropriate training syllabus and information booklet. Your BASIS Approved Trainer will also be able to advise you.

- **IF I FAIL THE EXAMINATION, CAN I RE-SIT?**

Yes you can re-sit the exam; however, BASIS examinations are accredited on the Higher Education qualifications framework. One consequence of this is that we need to ensure procedures are in place to improve candidates' chances of success in subsequent examinations following a previous failure.

Where candidates have been examined unsuccessfully on two occasions, they will be required to retrain before attempting the exam for a third time. Candidates and trainers will be required to complete a form to confirm that they have retrained, particularly covering areas that were identified as 'areas of weakness' at previous exams. The form should be presented to the exam Chairman at the third exam attempt. Failure to confirm that retraining has taken place will result in a refusal to conduct the viva examination and subsequent 'no result' for the exam.

Please help us to help you by asking your training provider to evaluate your training needs and undertake the training required to ensure you can pass the exam.

Those candidates wishing to go forward for the 'BASIS Diploma and later the HAUC Diploma in Agronomy with Environmental Management should be aware that only three attempts at any examination will be automatically permitted if that course is included as a qualification module for the diploma(s). A fourth attempt may be allowed in exceptional circumstances.

- **WHAT IF I FAIL ONE PART OF THE EXAMINATION BUT PASS THE OTHER?**

Requirements for individual exams are contained in the syllabus and information booklet.

- **IF I APPLY FOR A JOB WITHIN THE PESTICIDES / FERTILISER INDUSTRY DO I HAVE TO HOLD THE BASIS CERTIFICATE OR HAVE EXEMPTION FROM IT?**

If you have not previously been employed by a distributor you have up to three years from entering the industry in which to become qualified. During that time you must work under the supervision of a certificate holder. Anyone involved in the sale or supply of pesticides must hold the BASIS Certificate of Competence.

- **WHAT IS MEANT BY "WORKING UNDER SUPERVISION"?**

All good trading companies will require their new personnel to have an initial period of training, accompanied by a qualified member of their staff. There will come a time when the company will have to allow the representative to work on his own. Until such time that he/she becomes qualified, all advice given and sales made by the new representative must be monitored by a qualified person who should countersign their sales documentation.

- **HOW DO I APPLY TO SIT THE BASIS EXAMINATION?**

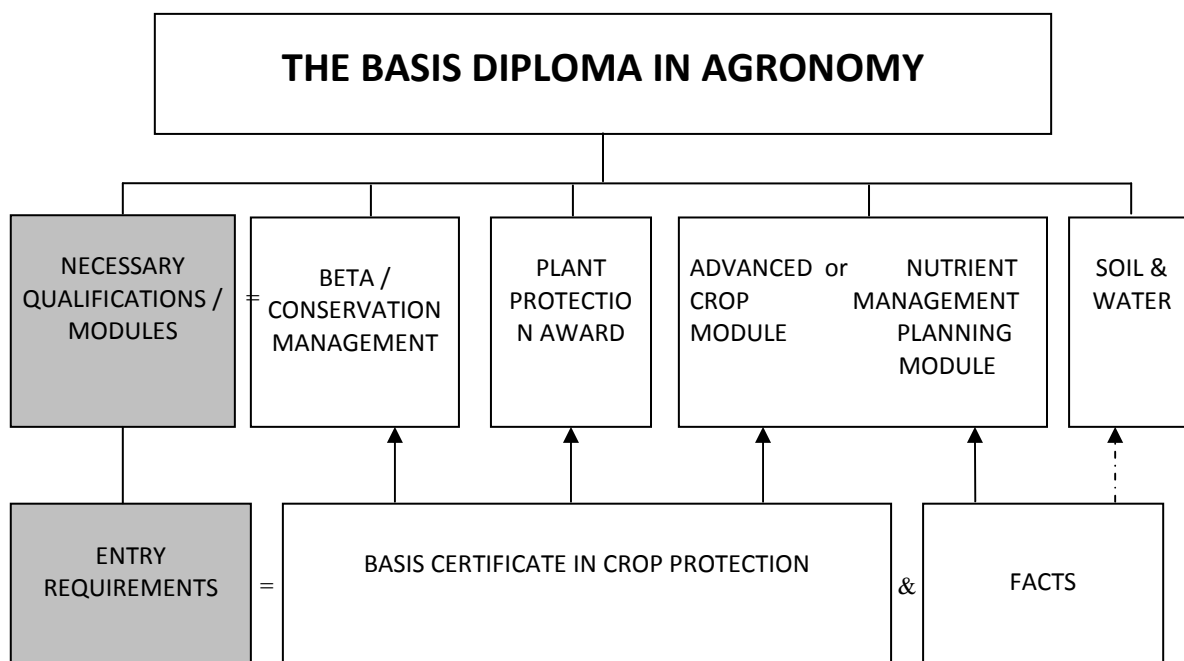
You will need to contact the relevant trainer (a list can be obtained from the appropriate syllabus and information booklet) to book a place on the course / exam.

- **WHEN WILL I RECEIVE MY EXAMINATION RESULTS?**

We aim to issue results and feedback within 4 weeks from the date of examination. **Please note results will not be given over the telephone.**

## THE BASIS DIPLOMA IN AGRONOMY

The breadth and scope of knowledge needed for crop protection sales and advice grows every year. New products, new techniques and the way that crop protection fits with other farm and crop management activities all add to the skills needed by those involved in sales and advice for Crop Protection. To cover the range of factors involved, the new BASIS Diploma in Agronomy, as set out below, gives a comprehensive training and qualification framework for those involved in on-farm advice and sales.



### TOPICS COVERED

#### **ADVANCED CROP MODULE / NUTRIENT MANAGEMENT PLANNING MODULE**

Weed, Pest & Disease Control, Crop Protection Programmes, Marketing, Food Industries, Crop Assurance, Nutrient Management

#### **BETA / CONSERVATION MANAGEMENT**

Environment, Biodiversity, EIS's, CPMP's, ICM, Climate Change

#### **PLANT PROTECTION AWARD (PPA)**

Systems & Society, Formulation, Mode of Action, Application, Health & Safety

#### **SOIL & WATER**

Cultivation Types and Properties, Cropping Systems, Water Quality, Drainage, Pollution/Waste, Plant Nutrition

For the PPA and the Advanced Crop Module(s) the prior achievement (by examination, exemption or validated certificate) of the BASIS Certificate in Crop Protection is an entry requirement. For the Nutrient Management Planning Module the prior achievement of the FACTS qualification is required.

The FACTS qualification is also a requirement for successful completion of the BASIS Diploma and strongly recommended for those wishing to train for the Soil and Water Management certificate.

Prior qualification of the BASIS Certificate in Crop Protection (or exemption or validated certificate) or the Crop Protection Management and / or POWER Certificates are required for the BETA examination. In some circumstances, other qualifications may be taken into account for BETA eligibility. BASIS Approved Trainers must be assured that in such cases, the prospective candidate is capable of completing the BETA course and passing the BETA examination.

It is **strongly** recommended that candidates should have had at least two years experience of on-farm practical agronomy before attempting any of the modules which contribute towards the BASIS Diploma in Agronomy, but in particular before taking the Plant Protection Award.

BASIS CPD points are available for training and certification in all modules of the BASIS Diploma.

Further details of the BASIS Diploma in Agronomy can be obtained from the BASIS office or by e-mail to [training.courses@basis-reg.co.uk](mailto:training.courses@basis-reg.co.uk).

The accreditation process for our qualifications has enabled BASIS to demonstrate a high standard of training and certification for our courses. Completion of (at least) 6 modules are required in order to obtain the BASIS Diploma in Agronomy.

A further consequence of accreditation on the Higher Education qualifications framework has been the development by HAUC of a Graduate Diploma in Agronomy with Environmental Management.

BASIS courses have all been awarded a number of credits based on the time spent on the course (Targeted Learning Hours). This is a recognised formula including face to face tuition time, research, reading and experiential learning. The credits are awarded at a level that reflects the intensity / difficulty of the learning materials, for example A level equivalent or 1st, 2nd or final year honours degree etc.

The qualifying BASIS courses with credits and levels awarded are shown below:

<b>FACTS</b>	
<b>Credit Value</b>	15
<b>Level</b>	Intermediate (Level 5)

<b>SOIL &amp; WATER</b>	
<b>Credit Value</b>	15
<b>Level</b>	Honours (Level 6)

<b>BASIS CROP PROTECTION</b>	
<b>Credit Value</b>	30
<b>Level</b>	Honours (Level 6)

<b>BASIS PLANT PROTECTION AWARD</b>	
<b>Credit Value</b>	15
<b>Level</b>	Honours (Level 6)

<b>BASIS ADVANCED MODULES / ADVANCED NUTRIENT MANAGEMENT MODULE</b>	
<b>Credit Value</b>	15
<b>Level</b>	Honours (Level 6)

<b>BETA / CONSERVATION MANAGEMENT</b>	
<b>Credit Value</b>	15
<b>Level</b>	Intermediate (Level 5)

Intermediate = 2<sup>nd</sup> or 3<sup>rd</sup> year of university (honours) degree qualification.

Honours level = final year university (honours) degree.

Eg. FACTS 15 credits = 150 hours notional teaching time

The six modules required for the BASIS Diploma add up to 105 credits. In order to qualify for the HAUC Graduate Diploma in Agronomy with Environmental Management, candidates will need to accumulate 120 credits (ie one extra 15 credit module in addition to the BASIS Diploma). This can be any of the Advanced Crop Modules or the new Nutrient Management Planning qualification, available from September 2009.

Other courses may in future be added to the list of eligible modules for this award (e.g. BASIS Nominated Storekeeper Award).