Agriculture is a very important part of Morocco’s economy, typically accounting for up to 20% of GDP. About 50% of the Moroccan population of over 30 million depend on agriculture so the sector carries considerable political influence. Although Morocco’s cereal area (usually about 5 million hectares) is bigger than the UK’s, average yields are less than 1 tonne/ha and large quantities of wheat and barley are imported as well as maize and oilseeds. Citrus is Morocco’s main agricultural export earner together with tomatoes, potatoes, vegetables and olive oil. The shortage of water and rainfall is a major constraint on production.

There is considerable official encouragement for IPM and biological control in Morocco. The German aid agency, GTZ, has an IPM project with small Moroccan farmers, providing training and educational programmes. There is also some production of beneficial insects in Morocco.

Pesticide and GMO regulations
Product registrations in Morocco are managed by the plant protection service, DPVCTRF, whose main office is an impressive modern building in Morocco’s capital city, Rabat. Dr Abderrahmane Hilali, the current director, has been in his post for about a year and faces some real challenges ahead. As well as helping to guide through new pesticide legislation, DPVCTRF is also involved in developing new legislation for genetically modified (GM) crops in Morocco. Dr Hilali expects that a compromise position will be found somewhere between the positions in the US and Europe. There have been some ethical objections raised to GM crops in Morocco, but it is not a subject much in the public eye as there are many more important concerns like unemployment and water shortage.

A new pesticide law is currently coming into force, loosely based on the French model. Temporary registrations granted under the new law are now valid for four years and full registrations for ten years. For products to be approved, they must also have a valid European or US approval. Under previous legislation, the duration of pesticide approvals was unlimited. In the past, only the Ministry of Agriculture was involved in pesticide registration matters but now several other ministries take part in the decision-making processes. Under the new law, there are also requirements for sales staff at retail outlets to be trained and qualified to sell pesticides. DPVCTRF has a training responsibility and role under the new legislation.

Methyl bromide replacements
Methyl bromide is very widely used in Morocco and will still be permitted for quarantine treatments in the future. Several official projects are underway to find replacements. For tomatoes, good results are being obtained from “solarisation” of the ground in August using a plastic sheet, which has proved effective up to depths of 30-40 cm. Research work is also being done with a local plant species which is toxic to nematodes.

Moroccan pesticide market
As with most crop protection markets today, the Moroccan market tends to be dominated by a handful of multinationals, in particular Syngenta, the market leader. Aventis CropScience, BASF and Bayer all have sizeable subsidiaries. DuPont and Dow have an appreciable presence through local distributors, but do not have their own direct sales operations. Local companies play a significant role, in particular Amaroc, Marbar, Promagri (Dow’s main distributor), Alphachimie, CPCM and Cali Maroc.
The trade association, AMIPHY (Association Marocaine des Négociants Importateurs et Formulateurs de Produits Phytosanitaires), Casablanca, represents the interests of some eighteen multinational and national pesticide companies in Morocco. These companies account for nearly 90% of the Moroccan crop protection market, valued at about US$80 million at user level. In a typical year, insecticides account for 45–50% of the Moroccan market, fungicides for 35–40% and herbicides for 10–15%. With the costs of field labour only about $5 per day, it is not surprising that the herbicide market is not large.

Company perspectives

Syngenta

Syngenta’s Moroccan subsidiary company was officially formed on 22 August 2001. The general manager is Boubker El Ouilani who leads a team of 25 staff. The company’s employees moved out of the Novartis offices in Casablanca to new offices in the north of the city. Syngenta has also recently inaugurated a new state-of-the-art warehouse facility. The Syngenta sales operations are complemented by local companies, in particular Marbar, which distributes the ex-Zeneca range of products.

Mr Mohamed Abidi is Syngenta’s marketing manager and has been with the company since 1989 when he worked for Ciba-Geigy’s Moroccan operations. With only one agricultural journal in Morocco and limited television and radio coverage, Mr Abidi recognised the need to improve information provision to farmers. To help this process, he recently launched a Syngenta magazine, Al Fallah. This has two meanings in Arabic, “the farmer” and “the success”, a clever play on words for this colour journal, published several times a year in both French and Arabic. Syngenta launched the insecticide Match (lufenuron) for use on vegetable crops last year and will be introducing Artera (propiconazole + cyproconazole) for control of cereal foliar diseases this year.

Aventis CropScience

Marc Chardet, commercial and marketing director of Aventis CropScience, estimates that the average farm size in Morocco is about 5 hectares. About 16% of farms use certified seed, 33% pesticides and 51% fertilisers. Some 80% of Moroccan farms are less than 10 hectares. Last year Aventis introduced the cereal fungicide Flamenco (fluquinconazole) and the herbicide Hussar (fenoxaprop + iodosulfuron). Its maize herbicide isoxaflutole has also been registered recently and approval for fipronil is expected soon.

BASF

Mohamed Chetouani, head of crop protection at BASF Morocco, says “the big factor in Morocco is the rain or lack of it”. If there were more, the crop protection market would be much bigger. Lack of growth in the market is holding back investment to some extent. He estimates that there are about 600–700 distributors in Morocco, mainly private and some small co-ops. Retail outlets are often ironmongers with a pesticide business on the side. Cereals are an important crop for BASF. However, Mr Chetouani estimates that only about 10% of cereals are treated with herbicides and less than 2% with fungicides.

Bayer

Mohamed Madkouri, Bayer’s technical director in Morocco expects to have iprovalicarb approved for mildew control soon. Confidor (imidacloprid) is the main product for Bayer in Morocco, widely sold in vegetables, top-fruit, potatoes, citrus and melons for control of whitefly and other insects. Bayer’s Nemacur CS, a new liquid micro-encapsulated formulation of fenamiphos, was approved in May 2001 for use as a liquid in irrigation systems and can now be used like methyl bromide. Bayer is also selling this product in Portugal with approval in Italy expected in 2003. Bayer’s botryticide Teldor (fenhexamid) was approved in 2000 for use in strawberries and in 2001 for vines. Approval for use in tomatoes and vegetables is expected at the start of 2002.