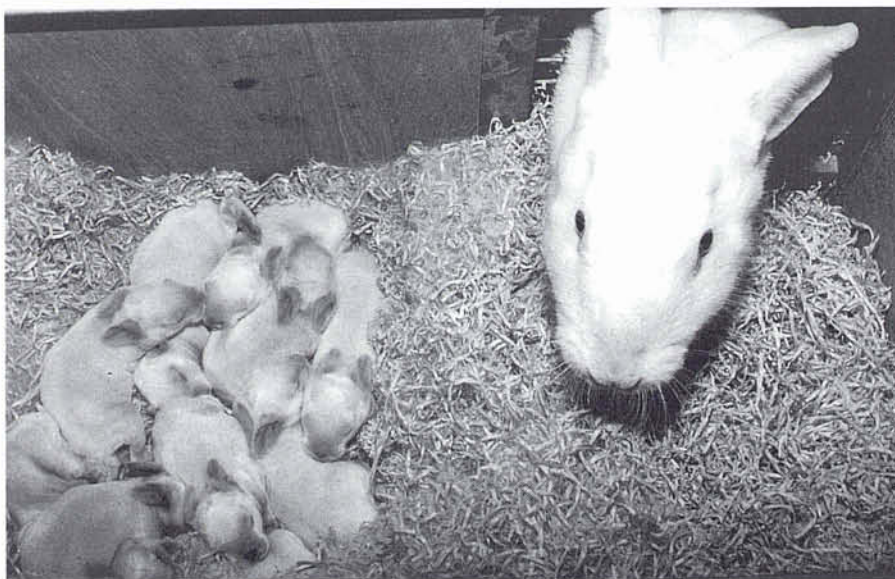


# THE IRTA: TECHNOLOGY FOR THE AGRARIAN SECTOR

THE "INSTITUT DE RECERCA I TECNOLOGIA AGROALIMENTÀRIES" WAS ESTABLISHED IN RESPONSE TO THE NEED TO CO-ORDINATE RESEARCH AND DEVELOPMENT IN AGRICULTURE, STOCK-FARMING AND THE FOOD INDUSTRY IN CATALONIA.

JOSEP TARRAGÓ DIRECTOR GENERAL OF THE IRTA



**W**hen the Catalan parliament set up the "Institut de Recerca i Tecnologia Agroalimentàries" as a public company in 1985, not only was a new institution born, but new possibilities came into play. The event marked the beginning of a new approach to food research and development in Catalonia.

The IRTA was originally made up of five previously existing public centres which until then had operated independently of one another, with only a minimum of co-ordination. The creation of the IRTA allowed a considerable increase in the resources available, simply through the greater flexibility and agility of the administrative structure.

Alongside this increased efficiency, there has also been an important increase in funds. Since its creation in 1989, the IRTA has doubled its budget,

without in any way affecting the proportion of the total costs covered by the *Generalitat de Catalunya* (less than 60%). This is a good indication of the IRTA's ability to raise funds from independent sources.

All this has resulted in an improvement in the facilities available and the enlargement of the work centres (six research centres in 1989), but also, more than anything else, in an increase in staff numbers and training. Obviously, the key to a research centre's success lies in the quality of the staff it employs. To promote this factor, the IRTA has encouraged the training of its researchers and appointed more scientists, who have reinforced the teams already in existence. In three years, the IRTA has gone from a workforce of 160, of which only 32% were engaged in R+D, to one of 271 at the end of



1988, of which 51 % are directly involved in R+D work, and from having eight doctors at the moment of its creation, to having 43 at the end of 1988. One of the IRTA's main objectives is to establish contacts with the private sector, so that the technology developed can be linked to the real needs of the sector. One of the most obvious indications that this object has been achieved is the extent to which the sector contracts R+D activity. The IRTA opened the doors to this contractual relationship soon after its foundation, and the result has been the 23 contracts obtained in 1986, which in 1988 were doubled in number and quadrupled in value.

R+D activity today makes no sense without international collaboration and co-operation. The IRTA therefore tries to promote participation in activities with international scientific connections. Amongst these activities, it is worthwhile pointing out our participation in several of the EEC's R+D programmes and in collaboration and exchange agreements between universities and research centres abroad.

In spite of the boost to food R+D in Catalonia, the IRTA's possibilities are limited and it has therefore been necessary to avoid their dissipation. We have tried to identify the most sensitive or the most significant points in the situation in Catalonia today and made a concerted effort to achieve the critical mass necessary if our results are to be competitive.

We have given priority to the following work:

Flowers and vegetables (garden produce, ornamental flowers and plants): The IRTA has directed its activity in this field in two directions: technology (greenhouses adapted to the Mediterra-



nean climate, watering, etc.) and genetic improvements (using the latest techniques in genetic engineering).

Mediterranean arboriculture: The IRTA has made considerable progress in the improvement of plant material (almond, hazel nut, etc.), in the perfection of more efficient growing and watering techniques and in the introduction of new species (pistachio, pecan, etc.).

Cereals: The IRTA stands out for the new varieties of cereals it has obtained (barley, wheat, etc.), specially adapted to arid conditions.

Plant protection: It is worth mentioning the progress made in the biological struggle against the white fly. The IRTA's field of activity also extends to virology and the fight against nematodes, as well as important work on mycorrhiza.

Animal foodstuffs: The IRTA's work is making it possible to establish new, highly efficient nutritional strategies incorporating local raw materials and subproducts in animal food.

Animal genetics: The work in this field has not been limited to improving production but has also included research of great interest in the recovery of high quality local varieties which could fetch higher prices on an increasingly demanding market.

Meat production: The IRTA's Meat Technology Centre is becoming an important centre specializing in meat quality.

Four years after the foundation of the IRTA, we cannot yet speak of spectacular achievements, but we are nevertheless satisfied with our conviction that this is the best way to go about modernizing the agriculture, the stock-farming and the food industry of Catalonia. ●