# Presentation of the Eminent Scientist Awards:

# Dr. R. Keith DOWNEY and Mr. Jacques MORICE

### Read by Dr. Rodney Mailer, Australia

Mr. President, members of GCIRC, distinguished guests, ladies and gentleman.

It is a great honour for me that I have been asked to present the awards for eminent scientist on behalf of the Groupe Consultatif International de Recherche sur le Colza. It is with double pleasure that I do this as we are to honour, not one, but two exceptional scientists within the field of rapeseed research.

It is appropriate that before I present these awards, I should explain the background and the significance of this presentation. The GCIRC decided to create an International award for Research on Rapeseed in 1983 to honour individual rapeseed researchers. The Board felt that development of the rapeseed industry had relied heavily on some specific and crucial scientific developments without which the level of scientific progress that has been achieved would not have been possible. The award was founded in recognition of these major developments. In 1985 the Board created an International Scientific Committee to choose the nominees. This Committee is made up of four GCIRC members. The Scientific Committee gathers information about possible nominees and meets at the General Assembly the year before an International Congress. The award to be presented is a medal.

The first award was presented at the 7th International Rapeseed Congress in Poznan, Poland in 1987. It was awarded to Professor Dr. B.R. Steffansson from the University of Manitoba, Canada for his work on rapeseed and his contribution to the new double zero «canola». The award was presented on the second occasion to Professor Ting-Dong Fu from the Institute of Crop Genetics and Breeding, Wuhan University, People's Republic of China. This award was presented at the Eighth International Rapeseed Congress in Saskatoon, Canada in 1991. Dr. Fu was recognised for his contribution to the development of hybrid cultivars in rapeseed. Dr. Fu developed the Polima male sterility system and opened up a new breeding pathway for rapeseed.

This is therefore only the third occasion on which these awards have been presented. As pertradition, nominations have been considered by the Board of Directors of the GCIRC. On this occassion, the choice between the two nominees was so difficult that both have been accepted for the award in 1995. As a result, in 1995, we again recognise two plant breeders, Dr. Keith Downey, Principal Research Scientist at Agriculture Canada Research Station, Saskatoon, Canada and M. Jacques Morice who for many years has been the Director of the «Station d'Amélioration des plantes» in Rennes, France.

From my research of the history of these two scientists, it was interesting to note that Dr Downey and M. Morice were born within two years of each other. Both men have worked and devoted there lives to rapeseed research for around 40 years. Their aims and achievements during his time have much in common.

#### Dr. Keith DOWNEY

Graduated from the University of Saskatchewan in 1950 and completed his Master of Science Degree in 1952 in Field Husbandry genetics. He received his PhD in Plant Breeding genetics in 1961 at Cornell University. Dr. Downey initially started as a Technical and Research Officer in 1951 at Agriculture Canada in Saskatoon, Saskatchewan. From there he moved through the ranks of Research Scientist, Acting Director, to Head of the Oilseed Section and finally to Senior Research Scientist Emeritus in 1993.

During Dr. Downey's career he has been presented with many medals, honorary life memberships and awards. These include:

Bond Gold medal of the American Oilseed Chemists Society: 1963

Grindley Medal, Agricultural Institute of Canada: 1973

Royal Bank Award: 1975

Officer of the Order of Canada from the Canadian Government: 1976

Government: 197

Century Saskatoon Agriculture Award: 1982 Gold Medal, Professional Institute of Canada: 1990

Honorary Doctor of Science, University of Saskatchewan: 1994

Clark Newman Award from Canadian Seed Growers Association: 1994

and in March 1995, Dr Downey was awarded the Canadian canola industries highest honour, the Canola Council's James McAnsh Award.

Dr. Downey is the breeder or co-breeder of 13 rapeseed/canola varieties and five condiment mustards many of which have dominated the Canadian production area. He has helped produce major changes in the nutritional quality of oil and meal of *Brassica* oil crops particularly through developing the first low erucic acid varieties of *Brassica napus* and *Brassica rapa* cultivars and the first double low (canola) *Brassica rapa*. He has also been involved in the development of the first low glucosinolate *B. juncea* strains. Together with quality improvements, these cultivars have represented major improvements in seed and oil yields.

Dr. Downey has authored some 200 scientific papers relating to Brassica oilseeds, several book chapters and co-edited the widely distributed book «Oil Crops of the World». He has taken part in many international trade and technical projects including two current oilseed improvement programs in China and India.

Dr. Downey officially retired from Agriculture Canada on June 30, 1993 but continues his active career as Research Scientist Emeritus at the Saskatoon Research Centre and as an adjunct professor of Crop Science at the University of Saskatch.

## M. Jacques MORICE

Studied agronomy at the Ecole supérieure d'agronomie de Rennes (Higher School for Agronomy in Rennes) where he received his title «Ingénieur agronome». He received his Master of Science degree from the Université de Paris.

M. Morice has been involved in rapeseed research at INRA,' the Institut national de la recherche agronomique' in France since 1956.

His activities between 1956 and 1973 have included many aspects of rapeseed biology and breeding. M. Morice was in charge of research on rapeseed at the «Station d'Amelioration des plantes» at Inra - Versailles. During this time his work included studies on floral biology and yield components. He developed the concept and methodology of breeding the pure variety or line

and produced an official definition of varieties for 'CTPS' (the Permanent Technical Committee for Breeding).

Following this development, he released Sarepta the first variety of this type, which became a model for French varieties in the field of private breeding.

M. Morice worked to improve resistance to Phoma lingam (also known as *Leptospheria maculans*). As a result he was successful in releasing a more resistant cultivar known as Major.

Furthermore, he worked to replace classical rapeseed varieties with low erucic acid types. He was again successful in his release of the first French winter rapeseed variety PRIMOR. M. Morice has continued to work on the development of methods to produce oo - winter rapeseed varieties.

In 1973 M. Morice became director of the 'Station d'Amelioration des plantes' in Rennes where he has worked until 1990.

During this period he was successful in producing other cultivars. In a cooperative program with INRA and SERASEM the 00 - variety DARMOR became available. Following up on this work and under Michel Renard's responsibility, a new variety SAMOURAI was produced.

M. Morice was involved in early studies on rapeseed hybrids including male sterility and heterosis. In conjunction with Michel Renard, and a co-operative program with SERASEM, a composite rape hybrid was released known as SYNERGY.

For many years M. Morice has been the coordinator of research on oilseeds including both rapeseed and sunflowers between INRA and other public and private research organisations such as AMSOL and CETIOM. He has been President of PROMOSOL, the organisation for funding INRA research with other organisations. He is also a member of CTPS, the official authority for registration of plant varieties and seed control.

M. Morice has been a member of the GCIRC since it's creation in 1977. He was President from 1982 to 1985, and as such was responsible for the International Rapeseed Congress in Paris in 1983.

The research activities of M. Morice have been wide ranging and include several bilateral programs between INRA and foreign organisations in China, India, Morocco and Poland. Although he retired from INRA in 1991, M. Morice is still active in his role as co-ordinator and scientific adviser for SERASEM and other oilseed organisations.