

19th International Sunflower Conference, Edirne, Turkey

- *Academician* DRAGAN
SKORIC, Republic of Serbia

HISTORY OF SUNFLOWER BREEDING IN THE WORLD

Presentation
2nd Part



FRANCE, Sunflower Breeding



Dr Felicity Vear, INRA, France. She has worked successfully on sunflower breeding and genetics in France. She has achieved world renowned results in the study of genetic resistance to downy mildew, Sclerotinia and Phomopsis, as well as in developing methods for testing disease resistance in sunflower.

FRANCE, Sunflower Breeding



André Bervillé, INRA, France



Georges Piquemal, INRA, France



Michel Denuc, INRA, France



Herve Serieys, INRA, France

Herve Serieys, INRA, France. He has achieved world renowned results in the study of wild sunflower species. He discovered a large number of different sources of *CMS* and *Rf* genes.

FRANCE, Sunflower Breeding



Philippe Jouve, France



Luka Ćuk, SYNGENTA, France

FRANCE, Sunflower Breeding



Dr Dominique Perret, SOLTIS, France



Jean Luc Madeuf, SOLTIS, France



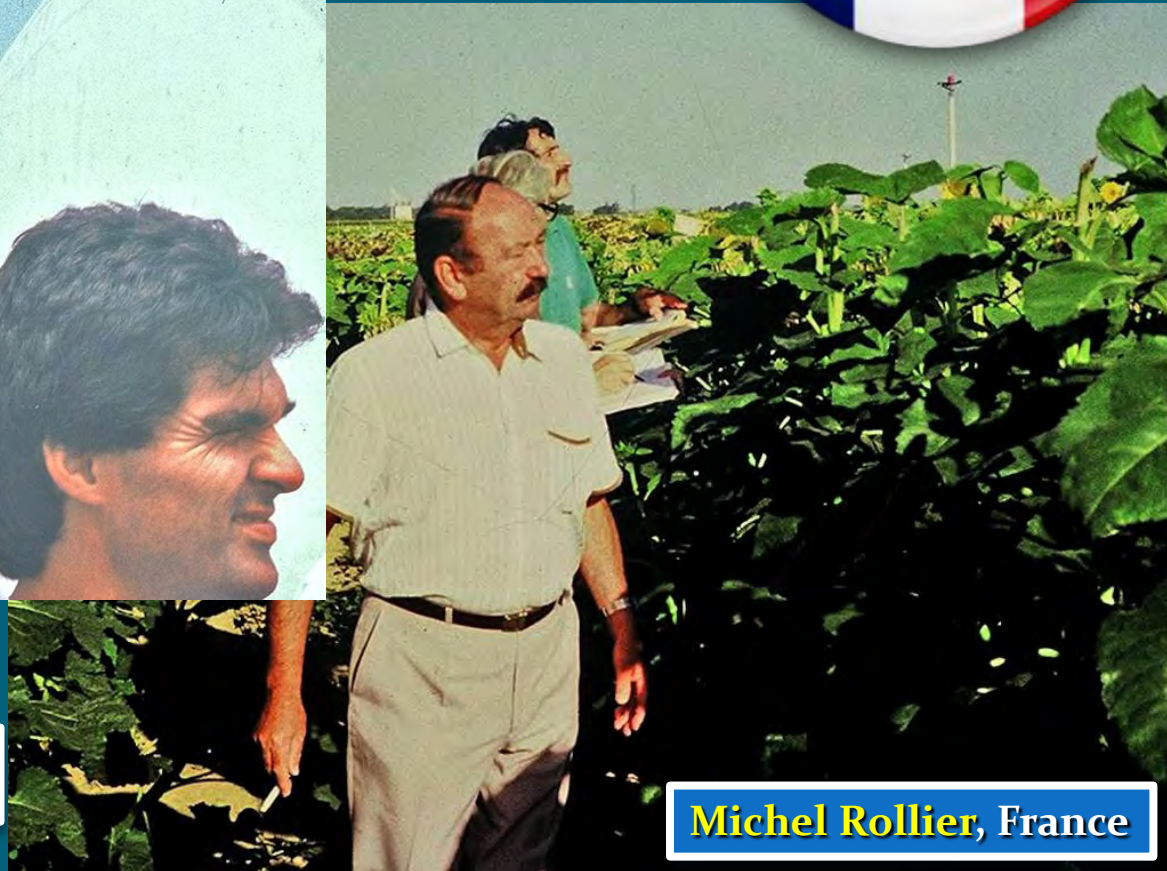
Thery André, SOLTIS, France

FRANCE, Sunflower Breeding



Ernst Vrancken,
Van der Have, France

Pierre Castellanet,
Causade, France



Michel Rollier, France

BULGARIA, Sunflower Breeding



BULGARIA, Sunflower Breeding



Authors of well known hybrid Albena:
Y. Stoyanova, and breeders team from IWS – General Toshevo Bulgaria.

Velkov and Petakov,
Bulgaria



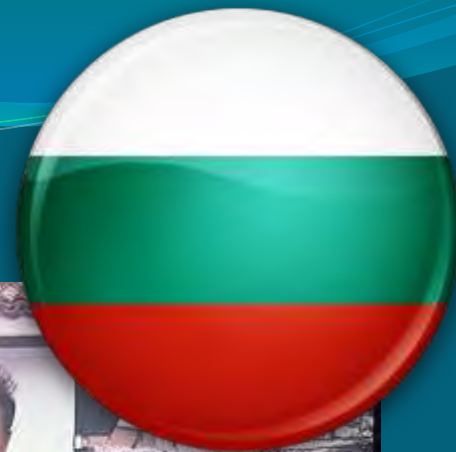
Dimitar Petrov, First Bulgarian sunflower breeder, IWS – General Toshevo Bulgaria

BULGARIA, Sunflower Breeding



Misha Christov, Bulgarian sunflower breeder, IWS – General Toshevo Bulgaria. He has achieved world renowned results in interspecific hybridization, discovery of CMS and Rf genes, and incorporation of disease resistance from the wild species into genotypes of cultivated sunflower.

BULGARIA, Sunflower Breeding



Jordanka Georgieva-Todorova, Institute for Genetics, Sofia, Bulgaria



Valentina Encheva, IWS – General Toshevo Bulgaria



Miroslava Christova, IWS – General Toshevo Bulgaria



Pepa Schindrova, IWS – General Toshevo Bulgaria

ROMANIA, Sunflower Breeding



Dr Florin
Stoenescu

Dr Alex V.
Vranceanu

Part of Romanian sunflower breeder from Research institute for Cereals and Industrial Crops, Fundulea, Jud Calarasi

ROMANIA, Sunflower Breeding



Dr Florin Stoenescu,
Fundulea, Romania



Dr Maria Pacureanu-Joita, Fundulea, Romania

The Romanian sunflower team, headed by Prof Dr Alex V. Vranceanu, was one of the world's leading teams in the areas of sunflower breeding and genetics and the study of disease in the second half of the 20th century (Dr F.Stoenescu, Dr Nick Parvu, Dr M.Pacureanu, Dr H.Iliescu, Dr M.Iouras, and others).



Prof Dr Alex V. Vranceanu,
Fundulea, Romania

ROMANIA, Sunflower Breeding



Nich Parvu, Fundulea, Romania



Dr Horia Iliescu,
Fundulea, Romania



Maria and Daniel Stanciu, Fundulea, Romania

EUCARPIA Conference, Sunflower Breeders, Prague, Czech Rep.



HUNGARY, Sunflower Breeding



A. Cereal Research
Institute (GKI), Szeged
Breeders:
Frank Jozsef
Nemeth Gizela
Sunflower hybrid: VIKI



Frank Jozsef

Gizela Nemeth

B. Reseach Institute for
Forage Crops,
Iregszemche
Breeders:
Prof Dr Erne Kurnik



Prof Erne Kurnik

HUNGARY, Sunflower Breeding



Prof Dr Ferenc Viranyi



Ilona Walz



Dr Laszlo Hargitay



**Zoltan Horvath,
Broomrape + insects**



Tinde Chengery, CEREOL

FAO – European Cooperative Research Network on Sunflower

Coordinators of the FAO – European Cooperative Research Network on Sunflower:

Prof. Dr Alex V. Vranceanu (1975-1989) and
Prof. Dr Dragan Škorić (1989-2006).



**Prof. Dr
Dragan Škorić**

**Prof. Dr Alex
V. Vranceanu**



Meeting of the FAO – European Cooperative Research Network on Sunflower, held in Novi Sad, 1984.

SERBIA, Sunflower Breeding

Institute of Field and Vegetable Crops, Novi Sad



Sunflower Breeding Program:

I 1938-1955: Beginning of breeding
Kislovski and Gibshman
O.P. Cultivar: Novosadski-4



II 1955-1978: Sunflower breeder:
Vida Nikolić-Vig



III from 1964 ...

Inbreeding and Heterosis:
Prof Dr Dragan Škorić



SERBIA, Sunflower Breeding



Sunflower breeding team at the Institute of Field and Vegetable Crops, Novi Sad, Serbia in the early seventies.

SERBIA, Sunflower Breeding



Ing. Vida Nikolić-Vig



Prof. Dr Tihomir Vrebalov



**Prof. Dr
Dragan Škorić**

SERBIA, Sunflower Breeding



Interspecific hybridization with wild sunflower species has been used to generate new genetic variability in the cultivated sunflower.



Gene bank:



**More than 7,000
new inbred lines**



SERBIA, Sunflower Breeding



**Dr Miroslav
Mihaljčević,**
Sunflower
breeder



**Dr Luka
Ćuk,**
Sunflower
breeder



**Prof. Dr Stevan
Maširević,**
Sunflower
phytopatologist



**Dr Radovan
Marinković,**
Sunflower
breeder

SERBIA, Sunflower Breeding



NS-Sunflower solgers



SERBIA, Sunflower Breeding



Dr Jerry Miller (USDA), Dr Siniša Jocić (IFVCNS)
and Dejan Jovanović, Sunflower breeders

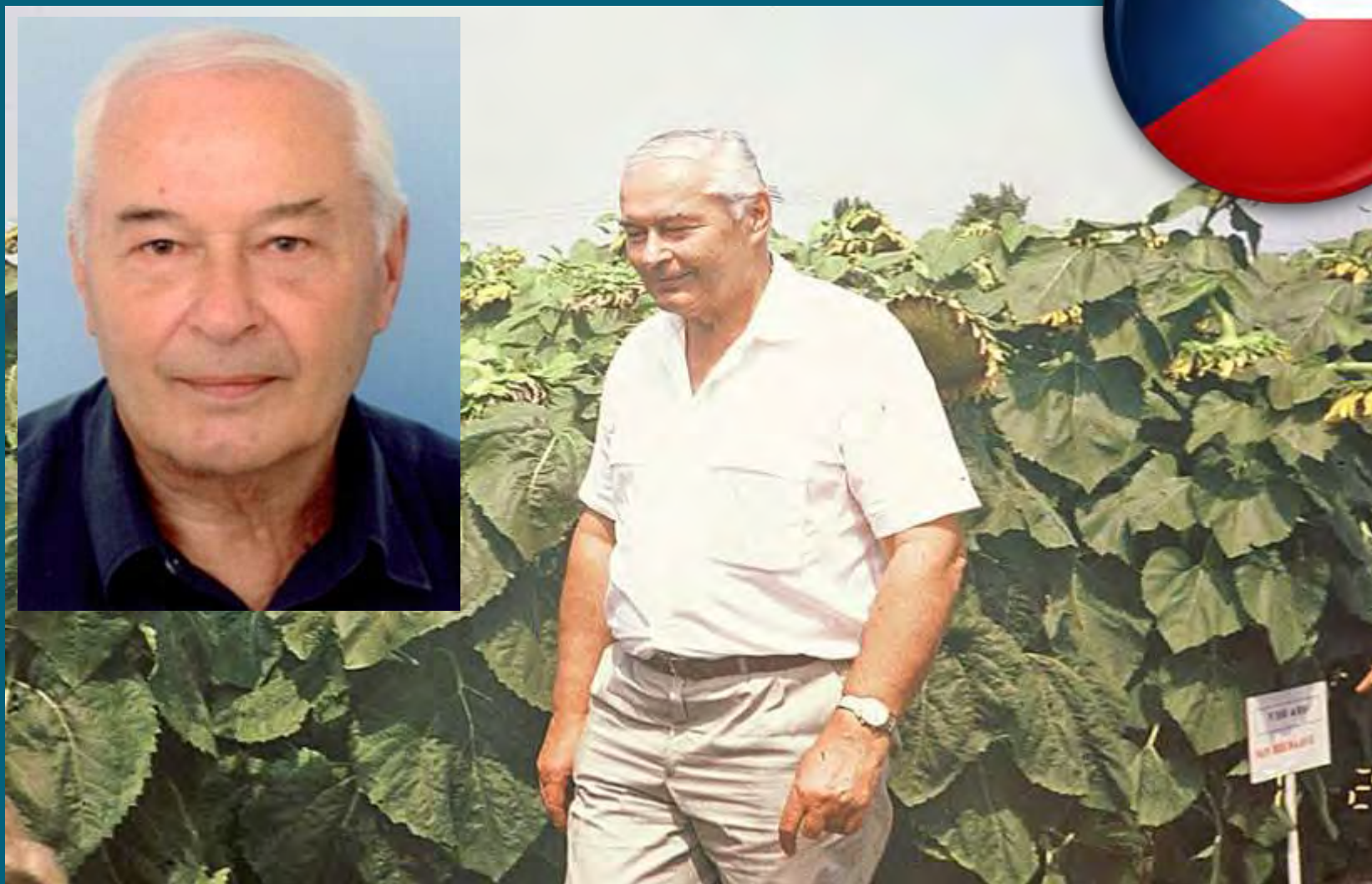


Prof Dr Dejana Panković,
(EDUKONS),
Molecular biologist



Dr Dejan Jovanović, and Dr
Branislav Dozet (Syngenta),
Sunflower breeders

CZECKOSLOVAKIA, Sunflower Breeding



Prof Dr Antonín Kovačík, Ryzine Institute Czechoslovakia

CANADA, Sunflower Breeding



**Prof Dr Waldemar
E. Sackston**



**Dr Eric D. Putt,
Sunflower breeder**



Prof Dr Waldemar E. Sackston (First from left),
Sunflower phytopathologist

SPAIN, Sunflower Breeding



Dr Jose Maria Fernandez-Martinez,
Cordoba, Spain



Juan Dominguez, Cordoba, Spain



Dr Begona Perez-Vich,
Cordoba, Spain



SPAIN, Sunflower Breeding



Dr Jose Maria Fernandez
Martinez, Cordoba



Dr Jose Maria Fernandez Martinez, Cordoba



Part of the Scientific
team from Cordoba with
Yalcin Kaya

SPAIN, Sunflower Breeding



Dr Leonardo Velasco,
Cordoba, Spain

Dr Leonardo Velasco,
Cordoba, Spain. One of the
world's leading scientists in
the use of induced
mutations for improved oil
quality in sunflower (fatty
acids, tocopherols).



Juan Fernandez-Escobar,
Cordoba, Spain



Maribel Rodriguez-Ojeda,
Cordoba, Spain

SPAIN, Sunflower Breeding



Luis C. Alonso



Rafael Carrascosa, Cargill Spain

PR CHINA, Sunflower Breeding



Prof Dr Tianping Wu,
Tiankui Seed
Technology, Beijing,
China

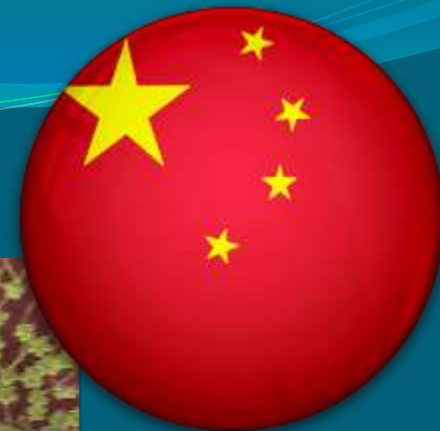


Dr Zhang Yi,
Institute for
Sunflower, Baicheng
City, Jilin Province,
China



Sunflower breeding
team from PR China in
conversation with **Dr**
C.C. Jan, USDA, USA

PR CHINA, Sunflower Breeding



Sunflower Breeders from China



Sunflower Breeding Group from Harbing, China with Academician Dragan Škorić



GERMANY, Sunflower Breeding



**Prof Dr Walter
Schuster**

Sunflower breeders
from Institute of Crops
Science and Plant
Breeding Justus-Liebig,
Giesen, Germany

**Prof Dr Wolfgang
Friedt**



Prof Dr Renate Horn

Prof Dr Volker Hahn



Pustovoit Awward, 9th ISC, Torremolinos, Spain, 1980



(Left to right) **Dr Eric D. Putt, Canada; Dr Patrice Leclercq, France; Dr Alex V. Vranceanu, Rumania; Dr Galina Pustovoit, USSR, Dr. Murray L. Kinman, USA.**



Pustovoit Awward, ISC Mar del Plata Argentina, 2012



(Left to right) **Dr Mihail Christov, Bulgaria;** **Dr Juan Dominguez, Spain;** **Dr Gerald Seiler, USA;** **Dr Chao Chien Jan, USA;** **André Pouzet, France**

ITALY, Sunflower Breeding



Prof Dr Gian Paolo Vannozzi, Università Degli Studi Di Udine,
Istituto di Produzione Vegetale, Udine, Italy

MOLDOVA, Sunflower Breeding



Dr M. Bobuceanu, Moldova

Prof Dr Maria Duca, Moldova

Dr Tudor Rotaru, Moldova

TURKEY, Sunflower Breeding



Prof Dr Yalcin Kaya, Sunflower breeder with associates from Trakya University Genetics and Bioengineering Department, Edirne, Turkey

TURKEY, Sunflower Breeding



Prof Dr Yalcin Kaya, Sunflower breeder from Trakya University,
Genetics and Bioengineering Department, Edirne, Turkey

Private Companies in TURKEY



**MAY-Agro
Seed Corp.,
Yildirim –
BURSA/TUR
KEY**

KURUMSAL TOHUM GELİŞTİRME ÜRÜNLER MAY HABERLER ÇİFTÇİ DÜNYASI İLETİŞİM

MAY Tohum
Yerinde Islah Stratejisi ile Çiğinesine
Kazandırıyor

2016 YILI YERİM SONUÇLARI

72MAY80 **73MAY81**

MAY Tohum'u seçenler kazanıyor
Çeşitlerimiz 2016 yılı verim sonuçlarını görmek için tıklayınız. >>>



Coral



Meteor CL



Nazar



Tanem

USE OF BIOTECHNOLOGY METHODS IN SUNFLOWER BREEDING

TO OVERCOME PROBLEMS IN INTERSPECIFIC
HYBRIDIZATION;

TO SPEED UP THE ACHIEVEMENT OF BREEDING
GOALS

- TISSUE CULTURE,
- EMBRYO CULTURE,
- PRODUCTION OF DIHAPLOIDS,
- PROTOPLAST FUSION,
- *In vitro* SCREENING,
- MOLEKULAR MARKERS (RAPD, SSR, AFLP,
- RFLP, MAS (marker-assisted selection)
- USE OF GENETIC TRANSFORMATIONS (GMO).



AUSTRALIA, Sunflower Breeding



Alan Scott, Sunflower breeder, Australia (in the middle),
with Dr Nada Hladni, Sunflower breeder from Serbia (right)

AFRICA, Sunflower Breeding



Maathy M. Kishta, Egypt, OilCrops
Research Station, Feri



Johan Potgieter, PANNAR
Sunflower breeder fom South
African Republic



Walter Anyanga,
Sunflower breeder, Uganda

INDIA, Sunflower Breeding



Dr Mulpuri Sujatha, Sunflower breeder, DOR, Hyderabad, India

BRASIL, Sunflower Breeding



Dr Jose de Bernas and Franca Neto, Brazil



Thank You for Your Attention