



**IAMFE - INTERNATIONAL ASSOCIATION ON MECHANIZATION OF
FIELD EXPERIMENTS**

IAMFE News 1'2013
August, 2013

Greetings from the President of IAMFE

Dear Leaders, Members, and Friends of the IAMFE Family,

I'm very pleased that the IAMFE News 1'2013 with so much important information will be published in August. I hope to send my greetings and thank you for your efforts for IAMFE.

We will welcome the 50th Anniversary Ceremony of IAMFE in 2014, I'm very pleased to see the invitation for 50th Anniversary of IAMFE which will be published in this News. The Norwegian and Swedish IAMFE Branches are arranging for this important event, and I'd like to thank them for their great efforts for this event. I am especially grateful to Prof. Egil Oyjord, the Founder of IAMFE, and Mr. Torbjørn Leuchovius, the former Executive Secretary of IAMFE for their contributions to the arrangement of IAMFE's 50th Anniversary Ceremony and the publication of this news letter.

On May 21-23 this year, I accompanied with the President of our university (QAU), Prof. Li Baodu, Director of Science and Technology Department of QAU, Mr. Wang Zhaohua, Director of International Communication Department of QAU, Professor Liang Anbo went to Saint Petersburg, Russia to participate in the International Agro-Environment Forum which co-hosted by Russian Academy of Agricultural Science and Russian Branch of IAMFE. I am very grateful to Dr. Vladislav Minin, Vice President of IAMFE for his excellent arrangement for the International Forum.

On August 6-15 this year, I went to Zimbabwe and South Africa to visit some experimental bases which were established by Chinese. During those days, I met with some leaders and professors of Zimbabwe University for finding some opportunities to establish one contact person or branch of IAMFE in Africa. I was glad to hear that they were very interested in my proposal. I think Zimbabwe Branch of IAMFE will be established in the near future.

In China, we had a plan of establishing seven Regional Centres of IAMFE this year, and Dr. Wang Jiasheng has been arranging for the task. So far this task is going well.

Thank you again for your efforts for our IAMFE.

China, August 20, 2013.

Shang Shuqi, President of IAMFE

Greetings and Information 2013 from the Founder of IAMFE

Dear leaders, members and friends of IAMFE,

IAMFE was founded in Norway in 1964. So far IAMFE has arranged 14 International Conferences and 7 Regional Conferences. A great number of National IAMFE Conferences has been arranged by the National IAMFE Branches.

In 2013 the Russian Branch of IAMFE arranged "The International Agri-environmental Forum".

Referring to the invitation from the Norwegian Committee for IAMFE's 50th Anniversary, published in this IAMFE News, I hope that national and international plant breeders, agronomists, agricultural advisors and administrators will take part in the planned arrangements at the Norwegian University of Life Sciences on June 27, 2014.

I am very pleased with the close cooperation with the Editor of IAMFE News, Mr. Torbjørn Leuchovius, who was Executive Secretary of IAMFE from 1993 to 2004.

The Swedish celebration of IAMFE will take place at the Borgeby show on June 25-26, 2014.

My work and studies since 1955 has been devoted to mechanization of plant breeding and agronomic research. During the last 50 years, this has become a specialized science within agricultural engineering.

In the spring of 1961, 20 units of 10- rows and 5 units of 4- rows Øyjord plot seeders were delivered from Jens.A. Schou Mek. Verksted, Drøbak, Norway.

Jens A. Schou was the first manufacturer in the world who could deliver serie-produced plot seeders with a batch type feeder in combination with a spinning distributor head for sowing of many rows. These seeders were especially designed for use by agronomists and plant breeders and were exported from Norway to 57 countries all over the world.

In 1970, six years after IAMFE was founded, I demonstrated my selfpropelled plot seeder to the winner of the Nobel Peace Prize 1970, Dr. Norman E. Borlaug.

In a letter of Nov. 13, 1970, Dr. Borlaug wrote to me:

"It will be a pleasure to work with you and IAMFE in the furtherance of the green revolution".

In a letter of Dec. 22, 1970, Dr. Borlaug wrote: "The small plot seeders have been very helpful in increasing the reliability of experimental results in India, Tunisia, Lebanon , etc".

These letters as well as the " Green Revolution Medal" I received from Dr. Borlaug in 1972, have been a very important inspiration for my work.

In order to get more time for my work for IAMFE, I transferred the production from Norway to the Wintersteiger factory in Austria in 1974-76.

I am glad to see that copies of my inventions are used in plot seeders made by many manufacturers. The Øyjord plot seeders and copies are used in more than 100 countries.

Award 2003: The Norwegian "Kings Medal in Gold" for design and export of plot seeders.

Please see www.iamfe.org and click Info and see "History of the Øyjord Plot Seeders" and read the quotations of letters from the users.

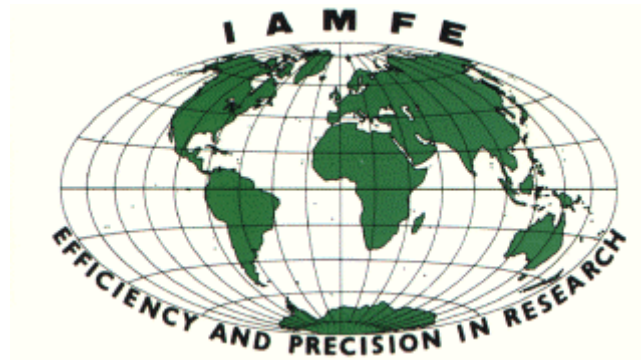
As a documentation of the usefulness of my inventions, I shall appreciate to get an updated version regarding the experiences of users of the original plot seeders from Norway as well as statements regarding the experiences of users of copies made by other manufacturers.

Norway, August 12, 2013.

Egil Øyjord

IAMFE

The International Association on Mechanization of Field Experiments



1964 - 2014

Invitation

to participate in Exhibition and seminars celebrating

IAMFE's 50th anniversary

June 25 – 26 Borgeby Fältdagar, Bjärred, Sweden

June 27 Norwegian University of Life Sciences, Ås, Norway



Hushållnings
sällskapet



NLR / Bioforsk / UMB

Bioforsk



SLU/Fältforsk



VFL/Agrotech

The IAMFE objectives

The International Association on Mechanization of Field Experiments (IAMFE) was established at the world's first international conference, exhibition and demonstration of scientific equipment for field experiments, arranged at The Norwegian Institute of Agricultural Engineering at Ås in 1964.

The objectives of the organization are to inform agronomists and plant breeders about new machinery, equipment and instruments to increase the capacity and the accuracy of experimental work. International cooperation is very efficient and a reasonable way for promoting development and production of scientific equipment for field experiments.

In cooperation with ministries, national and international organizations, universities and institutes, IAMFE arranges international and regional Conferences and Exhibitions on Mechanization of Field Experiments.

IAMFE was founded by Egil Øyjord who was President of the organization from 1964 to 2000.

The arrangements

To celebrate the IAMFE anniversary the Swedish and the Norwegian IAMFE branches will make two arrangements:

June 25 – 26 [Borgeby Fältdagar](#), Bjärred, Sweden

In connection to the Borgeby Field days there will be an exhibition of new machinery, equipment and instruments to increase the capacity and the accuracy of experimental work. There will also be arranged a seminar regarding Information and control systems in field experimentation.

June 27 Norwegian University of life sciences, Ås, Norway

On Friday June 27 there will be an arrangement on the site for establishing IAMFE in 1964. There will be a seminar celebrating the founding of IAMFE and focusing on the important role that field experiment have played to the development of the agricultural production.

In connection to the seminar there will also be an exhibition containing experimental equipment used in Norway for the last 50 years. There will also be possible to present new equipment at Ås, but Borgeby will be the main arena for new equipment.

Invitation to participate

The organizing committees want to invite all companies to participate in and present their equipment at these two arrangements:

Borgeby Field days



In 2013, there were almost 18 300 visitors and 340 exhibitors during the two days of the show. The chief organizer of the show is HIR Malmöhus AB.

Visitors to the exhibition pay a 2-day entrance fee of approx. EUR 16. There is no other IAMFE registration fee for this event.

Companies who wish to present their equipment on Borgeby Field days can contact:
info@borgebyfaltdagar.se , tel: +46 (0) 46 71 36 00

The Borgeby secretariat handles all practical contacts with exhibitors.

The exhibition fees are as follows for 2013 (prices for 2014 not set yet – probably a slight increase)

- Registration (basic fee): EUR 850
- Grass plot area: EUR 7/m², normally reserved in 150 m² lots *)
- Indoor booth: EUR 600 for 10 m² in a tent with floor **)
- Field demonstration areas: Included in grass plot area price ***)

*) Fractions of 150 m² might be reserved (for example 50 m²). Field demo areas included

***) The booths will be very good exposed inside or close to the seminar tent

****) The demonstration areas will be an early ripened cereal, ley/grass and open harrowed land

For more information, please read the Guide for Exhibitors (but please note the special conditions above that apply for this special exhibition. The show and seminar tent will be very centrally located in the exhibition field plan.

<http://www.borgebyfaldagar.se/dotnet/GetAttachment.aspx?id=643&siteid=51>

The Norwegian University of life sciences

Companies who want to present their equipment at Ås can contact einar.strand@bioforsk.no, tel. +47 452 86 870.

About us

The Norwegian Branch of IAMFE is a co-operation between The Norwegian University of life sciences (UMB), Norwegian Institute of agricultural and environmental research (Bioforsk) and the Norwegian Agricultural Extension Service (NLR). Together, they conduct basic and applied research as well as extension services linked to agriculture, rural development, plant sciences, environmental protection and natural resource management. They are all conducting a great number of field trials for research and advisory purposes.

The Swedish branch of IAMFE is located at the Unit of Applied Research (Fältforsk) of the Swedish University of Agricultural Sciences (SLU). SLU develops the understanding and sustainable use and management of biological natural resources. FältForsk is a contact unit between SLU and external organizations involved in agricultural field research. The mission is to coordinate and develop field research methods for planning and reporting results as well as stimulating the use of good routines/equipment in field and in laboratories.

The Knowledge Centre for Agriculture (Videncentret for Landbrug, VFL) is the main central supplier of professional knowledge for agricultural advisers and farmers in Denmark. The Knowledge Centre carries out a number of field trials and studies – alone or in co-operation with universities, other institutions and companies, but the Knowledge Centre has the final responsibility to ensure impartiality. The practical field trial work is carried out in close co-operation with AgroTech (an Approved Technological Service Institute) and the 31 local advisory centers.

The Swedish Rural Economy and Agricultural Societies are independent members organizations dedicated to enhancing an enterprising spirit in rural areas and promoting good rural and urban living environments. The first Agricultural Society was established on the island of Gotland in 1791. In the years that followed, local Agricultural Societies were established all over the country. HS Malmöhus was established in 1814. There are 18 local Rural Economy and Agricultural Societies today, we are represented in every county.

A Chinese Delegation from QAU Visited Russia and Sweden

By President of IAMFE, Professor Shang Shuqi

On May 19-24, 2013, A Chinese delegation including the President of Qingdao Agricultural University, Professor Li Baodu, Director of Science and Technology Department of QAU, Mr. Wang Zhaohua, Director of International Communication Department of QAU, Professor Liang Anbo and me visited Moscow State University, Saint Petersburg State University, Northwest Society of Agricultural Engineering and Electrification, and Swedish University of Agricultural Sciences. One task of our abroad trip was to participate in the International Agro-Environment Forum which co-hosted by Russian Academy of Agricultural Science, Russian Department of Agriculture, European Association of Agricultural Engineers, and International Association on Mechanization of Field Experiments (IAMFE). In this forum, I gave a presentation titled Current Situation and Development of Field Experiment Mechanization in China.



Fig. 1 Professor Shang Shuqi is giving a presentation

During the visit to Northwest Society of Agricultural Engineering and Electrification, both sides agreed to conduct more and further collaboration which will surely benefit the agricultural machinery development in both China and Russia. I also met with Dr. Minin, the Vice President of IAMFE, to discuss the plan of IAMFE.

While visiting Saint Petersburg State University, they unanimously agreed to start a new cooperation in research projects, faculty and student exchange programs. A China-Russia Agricultural Mechanization Research Center will be set up at Qingdao Agricultural University.



Fig.2 Visiting the Russia Farm Machine Museum



Fig. 3 Meeting with Dr. Minin

When visiting Swedish University of Agricultural Sciences (SLU), I held a meeting session with Mr. Torbjorn Leuchovius, director of field experiment team at SLU and the former Executive Secretary of IAMFE, about further cooperation between SLU and QAU, current operation of IAMFE headquarters at Qingdao Agricultural University, and how to organize the 50th ceremony of IAMFE in 2014.

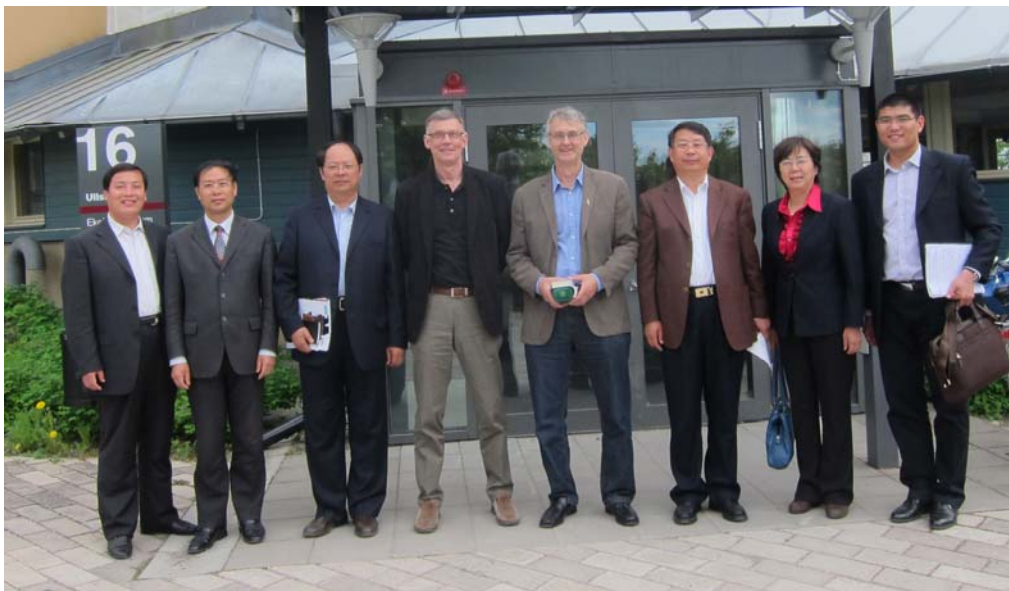


Fig. 4 Visiting Swedish University of Agricultural Sciences

The International Agri-environmental Forum, St. Petersburg, Russia

The International Agroenvironmental Forum was held on **21 to 23 May, 2013**, in the North-West Research Institute of Agricultural Engineering and Electrification (SZNIIMESH), Saint Petersburg, Russia.

The forum had included:

- 8-th International Scientific and Practical Conference «**ECOLOGY AND FARMING TECHNOLOGIES: AGRO-ENGINEERING APPROACHES**»;
- 3-rd Regional Conference of Nordic Countries «**FIELD RESEARCH FOR SUSTAINABLE DEVELOPMENT OF RURAL AREAS**»
- Round Table Discussion: «**MITIGATION OF ADVERSE ENVIRONMENTAL EFFECT OF REACTIVE N IN FARMING** »

The main aims of the Forum were as follows:

to present and to discuss

- developments of agricultural engineering, designed to reduce the negative environmental effect of farming
- the measures of efficient use of nutrients in farming practices
- new tasks of agricultural and field experimentation to address the challenges of present-day farming and agro-ecology
- environmental legislation and control in farming

The Forum has given the scientists, researchers and farmers from Russia, CIS and Western countries, an opportunity for networking and exchange of opinions and ideas.

More than 180 scientists, professors, engineers, farmers and PhD students from Russia, China, Finland, Belorussia, Ukraine, Poland, Netherlands, Sweden, Lithuania, Latvia, Czech Republic, Estonia and Germany participated in the Forum.

The Forum had an inter-science character and its program included plenary sessions, parallel oral sessions, round-table discussion, poster session, and professional tour.

The Opening Plenary session included Greetings and scientific reports.

Professor Yury Lachuga, Vice-President of the Russian Academy of Agricultural Sciences and Chairman of the Organizing Committee opened the plenary session and gave a brief introduction of the current agricultural engineering situation in Russia and in the World. He raised a discussion of how to meet environment protection tasks in agriculture.

Professor Li Baodu, President of Qingdao Agricultural University and host of *the 14th International Conference and Exhibition on Mechanization of Field Experiments* presented greeting from Chinese agricultural engineers.

At the Plenary session Professor Shang Shuqi, President of IAMFE presented a report about the International Association on Mechanization of Field Experiments status and Chinese branch of IAMFE.

A special Session “Field Research for Sustainable Development of Rural Areas” was devoted to work on mechanization of field experiments.

The session had two moderates: Professor Aleksey Ivanov, Agro Physical Research Institute and Chairman of Russian commission of Field Experiments and Dr. Vladislav Minin, Vice President of IAMFE.

Dr. Vladislav Minin presented a report on “Tendency in field experimentation development in the World: opening prospects” which was followed by active discussion.

The Session worked two days and 22 papers were presented from Russia, Ukraine, Belorussia, Finland and Lithuania and they were related with different aspects of field experimentation, its mechanization, autoimmunization and research results delivery.

During session work we discussed IAMFE activities and prepared a draft of a resolution which was sent to the Organizing committee as a basis for preparing a final resolution of the Forum.

Professor Arthur Kushnarev, Ukraine Research Institute of Testing & Forecasting Machinery for Agricultural Production (tmm11@yandex.ru) and Dr. Pavel Novitsky, Belarusian State Agricultural Academy (navitski_pavel@tvt.by) have promised to activate Ukraine and Belorussia IAMFE Branches. I will contact them a bit latter.

The Proceedings of the Forum were edited in three volumes.

During a Study tour we visited Experimental Fields of Agro Physical Research Institute in Menkovo village and we were acquainted with modern field experiments' design and special technique for precision agricultural activities in the experimental field (seeders for seeds and fertilizers and combines and drone, all devises with GPS). Latter on we visited unit for active poultry manure processing at Poultry Factory "Oredeg" and Nicolay Rerih' Museum Estate.

All participants agreed that the Forum was very useful and informative and asked that the Resolution of the Forum should include a proposal for organizing the next Agri-Environmental Forum in 2015.

Dr. Vladislav Minin,
Vice President of IAMFE



Picture 1. Participants of the Forum Plenary Session



Picture 2. President of Qingdao Agricultural University, Professor Li Baodu awards Vice-President of IAMFE, Dr. Vladislav Minin by title and diploma of Honoree Professor of Qingdao Agricultural University



Picture 3. President of IAMFE, Professor Shang Shuqi presentation at the Forum Plenary Session.



Picture 4. Experimental Field of Agro Physical Research Institute. Automatic Meteorological Station



Picture 5. Modern Machinery for field experiments at the Experimental Field of Agro Physical Research Institute

Establishing Seven Regional Centres of IAMFE in China

By Executive Secretary of IAMFE, Dr. Wang Jiasheng

I. The reasons for establishing regional centres of IAMFE in China

China is a big country with a population of 1.4 billion and a total land area of 9.6 million square kilometers which is divided into 23 provinces, 3 municipalities and 5 autonomous regions. As the wide geographical distribution of China, different provinces and regions have huge differences in climate, crops, planting model, feature of farm land and so on. It's very difficult for China Branch of IAMFE to carry out the work of field experiments in such wide area. Therefore, China Branch of IAMFE proposed that more regional centres of IAMFE in China should be established and every regional centre manage the local regional work of field experiments. In this way, the work of IAMFE in China will develop more efficiently. The proposal has got full support from the Founder of IAMFE, Professor Egil Oyjord. The plan was also discussed when the President of IAMFE, Professor Shang Shuqi visited Russia and Sweden in May. The Vice President of IAMFE, Dr. Vladislav Minin and the former Executive Secretary of IAMFE, Mr. Torbjorn Leuchovius, gave full support to the plan. They both believe it will promote a great future progress for China.

II. Regional division

Considering China's particular facts and regional difference, we decided to establish seven Regional Centres of IAMFE in China. The seven Regional Centers consist of North China Centre, Northeast China Centre, East China Centre, Northwest China Centre, Central China Centre, South China Centre, and Southwest China Centre. The distribution of seven regional centres on map is shown in Fig 1. The list of provinces which are contained in the seven regions is shown as Tab 1.



Fig.1 Distribution of Regional Centres of IAMFE and Provinces in China

Tab.1 List of Provinces in seven regions

Regions	Provinces, municipalities, or autonomous regions
North China	Beijing, Tianjin, Hebei, Shanxi, Inner Mongolia
North East	Liaoning, Jinlin, Heilongjiang
North West	Xinjiang, Ningxia, Qinghai, Gansu, Shanxi
East China	Shangdong, Jiangsu, Zhejiang, Shanghai, Jiangxi, Fujian, Anhui
Central China	Henan, Hubei, Hunan
South China	Guangdong, Guangxi, Hainan
South West	Sichuang, Chongqing, Yunnan, Guizhou, Tibet

III. Strategy for the task

With the support and help of Chinese Seed Association, agricultural colleges, breeding research institutions, and agricultural administration departments throughout China, the seven regional centers will be established and regional representatives could be selected. Regional

offices will be set where the representatives work. Each province will select one representative and set up one contact office which is responsible for the regional center. Regional center representatives and provincial representatives will be selected from agronomists and breeders who would like to volunteer for field breeding mechanization. Regional center members come from agricultural colleges, seed companies, provincial or municipal agricultural science academies, field trial station, and seed machinery manufactures.

IV. Duties of the Regional Centers of IAMFE

Regional Centers will function in the following ways:

- a. Investigate the current situation of mechanization of field experiments in local region, and know about the requirements for machines of field experiments, and then deliver the information to IAMFE headquarter. At the same time, delivering information from IAMFE headquarters to regional breeders and assisting IAMFE in carrying out regional service of field experimental mechanization;
- b. Bridge plant breeders and machine experts, seed agencies and seed machine manufacturers. Inform the local agronomists, plant breeders about new machinery, equipment, instruments and other technologies for increasing the capacity, accuracy and application of experimental work. Spread and promote applications of good breeding machines or new technologies in local area.
- c. Help IAMFE organizing domestic or international academic conferences and equipment exhibitions. Inform the local agronomists, plant breeders, machinery manufacturers to participate in the activities which are organized by IAMFE.

V The present progress of the task and the next step

We firstly informed China Ministry of Agriculture and the China Seed Association of our plan to get their support. They have welcomed and supported our plan for establishing Seven Regional Centres of IAMFE in China. They also have recommended some agronomists and breeding experts to be in charge of the regional centres. In order to let more agronomists and plant breeders know this plan, we have written the strategy to them, and those who are interested in this work will join the Regional Centres. We also phoned or email to every provincial Academy of Agricultural Sciences, it's very important to get their support. So far, some experts from different regions of China have replied us and said they would like to serve for the local regional centres of

IAMFE. We have also roughly selected seven agricultural universities from the seven regions to host the regional centres of IAMFE. They are China Agricultural University for North China Region, Shenyang Agricultural University for North East Region, Xinjiang Shihezi University for North West Region, Qingdao Agricultural University for East China Region, Central China Agricultural University for Central China Region, South China Agricultural University for South China Region, Sichuan Agricultural University for South West Region.

Regarding the next step, we plan to gather together those who would like to join the regional centres of IAMFE to held the first meeting to elect the directors of the regional centres of IAMFE and to declare the formal establishment of the Seven Regional Centres of IAMFE.