Training Agenda, Cochran Fellowship Program

Study Tour coordinator – Jim Stanelle, 920 858 1968 Assistant Coordinator – Ron Larson 406 581 2327

The Forage and Range Laboratory, Logan, Utah

Department of Agriculture center of excellence for breeding for plant improvement, molecular biology, and ecology & agronomy in forage and range species for the Western US.

Mission: Provide improved plant materials and management alternatives for sustainable stewardship of rangelands, pastures, and turf in the western United States.

Friday June 22, 2012

8 AM

Arrive at the USDA-ARS Forage & Range Research Center & general introductions

8-:8:20 AM

General tour of the laboratory (Dr. Ivan Mott)

8:30-10:30 AM

Scientist Presentations

- 1) Dr. Jack Staub: Introduction to the laboratory (10 minutes)
- 2) Dr. Doug Johnson: Previous research efforts in Kyrgyzstan (15 minutes)
- 3) Dr. Tom Monaco: Rangeland ecology of the Great Basin (15 minutes)
- 4) Dr. Mike Peel: Rangeland & pasture legumes (15 minutes)
- 5) Dr. Joe Robins: Pasture grasses (15 minutes)
- 6) Dr. Blair Waldron: Forage kochia (15 minutes)
- 7) Dr. Tom Jones: Perennial grasses for rangelands (15 minutes)
- 8) Drs. Ivan Mott & Steve Larson: Molecular biology for plant improvement (20 minutes)

10:45 AM-12:30 PM

Seed Production and Research

- 1) Visit Seed Production Field (North Park) Mr. Michael Bouck
- 2) Visit Seed Cleaning Facility (Compound: Greenville Farms) Mr. Michael Bouck
- 3) Visit Breeding Nursery (North Park)
 - Drs. Jack Staub, Doug Johnson, Tom Jones

4) Lunch

12:30-1:30 PM

Evans Experimental Farm: Grass and Legume Research Drs. Joe Robins, Blair Waldron, Mike Peel, Tom Jones, Doug Johnson & Jack Staub

1:30-3:00 PM Travel to Blue Creek Experimental Farm

3:00-4:00 PM <u>Blue Creek Experimental Farm: Grass and Legume Research</u> Drs. Joe Robins, Blair Waldron, Mike Peel, Tom Jones, Doug Johnson & Jack Staub

4:00-5:30 PM Return to Logan

Kyrgyz Republic

Robert Kadyrkulov

Mr. Kadyrkulov runs the Raiymbek seed farm, which specializes in grains such as corn, safflower and perennials as well as sugar. On his 500 hectare farm, 90 hectares are dedicated to perennial grasses such as alfalfa. He is interested in developing perennial grass production further through the study of new technology, weed protection and pest control. He is also interested in developing ties with technology companies and learning more about private business structures in the US. Mr. Kadyrkulov has an engineering background and employs 18 workers on his farm, does some consulting and has worked with USAID to develop sugar production. He would like to further develop his knowledge and experience before making recommendations for his regional clients.

Akylbek Kasmaliev

Mr. Kasmaliev is a director of Kalmak, an agricultural cooperative specializing in potatoes, perennial grasses, and he has focused no esparcet since 1994. One third of his 28 hectare farm grows perennial grasses and the rest is dedicated to barkwood for feed and potato production. Mr. Kasmaliev is an agronomist by education, and would like to acquire more knowledge and experience about new techniques and technologies in perennial grass production, specifically on how to handle and clean the grains.

Esenbek Kenjebaev

Mr. Kenjebaev is a head of Kenjebaev, a farm consisting of 18 people that specializes in wheat, corn and sunflower. 5 hectares of the 40 hectare farm are dedicated to perennials, but he would like to increase that number. Mr. Kenjebaev also produces 30-40 tons of wheat per year. He is interested in acquiring knowledge about new techniques and technologies for feed and irrigation, as well as weed and pest control. Mr. Kenjebaev would like to use this experience to use in his professional and practical development.

Ulan Sultanbekov

Mr. Sultanbekov is a head of a division in the Department of Plant Protection, which is an international department handling disease and weed control. As a research agronomist, he studies on 500 hectares of perennial land and is interested in pest control. Mr. Sultanbekov is interested in integrated protection of pest control as well as with new technologies to fight biological diseases.

Kubat Kaseiinov

Mr. Kaseiinov is an Adviser to the Minister of Finance on Agricultural isssues. He is interested in developing the perennial grasses sector for feed of livestock in order to preserve stability and build government support of the industry. Mr. Kaseiinov is interested in how the federal government interacts with the private industry, how to control weeds and pests, how to store grains and how to operate big farms. As an attorney and agronomist by education, he is also interested in learning as much as possible about the agricultural legislation process.

Dzhumgalbek Sagynov

Mr. Sagynov is a head of biosafety in agricultural products and focuses on increasing competitiveness in nine sectors of agriculture. As such, he researches mineral soil fertilization and would like to learn more about improving the growth of perennial grasses. He is also interested in developing the extension service with regards to newly acquired knowledge about techniques and technologies. As an agricultural economist, Mr. Sagynov is also interested in developing pest and weed control in his country, and he conducts regular seminars and trainings related to perennial grass growth.

Marlen Tunaliev

Mr. Tunaliev is an expert analyst in the Market Development Service of Agribusiness Competitive Center, a consulting company focusing on the development of agricultural cooperatives in the marketing of potatoes and beans. He would like to learn how to develop an effective model for perennial grasses, as a few clients have a business plan to develop this product. Mr. Tunaliev is interested in how research and development is conducted, types and varieties of perennials grasses, marketing as well as storage strategies.

Manasbet Umetaliev

Mr. Umetaliev is a chair of a AlChyken, a seed fund focused on feed crops such as Lucerne and corn. As a farmer himself, he has over 500 sheep, 25 cattle on 50 hectares of rented land; 15 hectares are used for feed. Mr. Umetaliev would like to learn how to increase his yield and how to manage pests and weeds. He would also like to see different harvesting techniques, how to use chemicals on his farm as well as a more efficient production process and diversify his crops to include alfalfa and espcarcet. With 20 employees and 50 members in his seed fund, he would like to spread knowledge he gains to his peers.

Talaybek Aidaraliev (alternate)

Mr. Aidaraliev is a general director of the agricultural cooperative Alfa Semena, which specializes in Lucerne and currently has contracts to export to Russia and Byelorussia. As a former Cochran Fellow, he used his knowledge to privatize different crop varieties and import from Lithuania. Mr. Aidaraliev would like to develop new technologies and techniques for growth of perennial grasses, and he would also like to learn more about chemical pest control technologies and would like to learn more about photosynthesis.



The Cochran Fellowship Program delegation from Kyrgyzstan visiting the Forage and Range Research Laboratory.



Dr. Joseph Robins explaining an experiment involving grass/legume mixtures at Evans Farm, Utah.



Dr. Doug Johnson of the Forage and Range Research Laboratory explaining the experimental design of a drought stress experiment under the movable rainout shelters at Evans Farm, Utah.



Dr. Blair Waldron explaining the potential of forage kochia for increased productivity on western rangelands at Blue Creek, Utah.



The Cochran Fellowship Program delegation from Kyrgyzstan inspecting a replicated trial of grasses originating from Kyrgyzstan at the Evans Farm, Utah.