

## **General Report on International Symposium on the Reclamation of Sodic and Soda-Saline Soils**

The Subcommittee on Salt Affected Soils of the ISSS in association with the Ministry of Agriculture of the Armenian SSR held a Symposium at Yerevan, Armenia on 26–31 May, 1969.

The Symposium was formally opened by Mr. H. V. Oganessian, Minister of Agriculture of the Armenian SSR, and Chairman of the National Organising Committee. Delegates were welcomed by representatives of the Armenian Government, USSR Ministry of Agriculture, USSR Ministry of Melioration and Water Economy, International Society of Soil Science, UNESCO and FAO, Professor Dr. I. Szaboles, Chairman of the Subcommittee on Salt Affected Soils and Professor Dr. G. P. Petrosian, Director of the Armenian Research Institute of Soil Science and Agrochemistry addressed delegates and extended a cordial welcome on behalf of the Organising Committee of the Symposium.

### *Attendance*

One hundred and fiftyone participants attended the Symposium. Twenty-two countries were represented as follows: Australia (1), Belgium (1), Bulgaria (3), Canada (1), Czechoslovakia (1), France (3), GDR (1), GFR (4), Hungary (18), India (1), Iraq (1), Netherlands (3), Peru (1), Portugal (1), Rumania (4), Spain (2), Tunisia (1), Turkey (1), UAR (1), USA (3), USSR (92), Yugoslavia (7).

### *Papers*

Fifty papers, most of which were available prior to the Symposium, were read in either English or Russian with concurrent translation into the second language. Broadly, the papers covered the following aspects within the general theme of reclamation and utilisation of soils of high sodium carbonate content:

- |  |           |
|--|-----------|
| I. General concepts of soda salinity, the effects on soil properties and the problems of reclamation | 4 papers  |
| II. Methods of reclamation and utilisation of soda-saline soils in particular areas                  | 26 papers |
| III. Classification, genesis and geography of saline soils in different countries                    | 12 papers |
| IV. Laboratory experiments and techniques  | 6 papers  |
| V. Specific aspects of soil drainage   | 2 papers  |

The presentation of papers occupied most of the time available, consequently little formal discussion was possible. However, delegates took advantage of opportunities for informal discussion on many of the aspects presented in the papers.

*Excursions*

A visit to the Research Institute of Soil Science and Agrochemistry demonstrated the wide field of research being carried out by the Armenian Ministry of Agriculture in the fields of soil classification and mapping, soil fertility, soil testing, clay mineralogy, soil biology and plant nutrition.

Without doubt a highlight of the Symposium was the excursion to the Reclamation Experimental Station at Yeraskhahun where large tracts of land on the Ararat Plain affected by sodium carbonate are being treated with sulphuric acid. All phases of the reclamation techniques from initial preparation of the land for ponding and subsequent irrigation to the introduction of concentrated sulphuric acid into the ponding water were demonstrated. The growth of cereals, lucerne, vines and fruit trees on soils which have been reclaimed provide visual evidence of the success of the techniques.

A full day excursion into the mountainous regions of Armenia and terminating at Lake Sevan provided contrasts in soils, agriculture and scenery. Delegates were shown, intermingled with the beautiful scenery, stony chestnut soils on steepplands being utilised for fruit growing and afforestation, and fertile mountain chernozems under wheat and pastures.

*World Map of Salt Affected Soils*

Draft maps for each continent were presented to a meeting of representatives of the Subcommittee. The basis for each map was discussed and, as a consequence Dr. Szabolcs presented a brief working paper outlining some of the points requiring consideration as prerequisite to the preparation of a unified legend and world map. It was decided that further chemical and morphological data relating to the different map units were required, and that these data should be forwarded by members of the Working Group to Dr. Szabolcs who will be responsible for integrating the systems of classification used in the various regions. A small correlating committee will meet in 1970 to examine the results before submitting them to the Working Group for agreement.

*Final Session*

Recommendations regarding the scope of future research work on salt affected soils were passed.

A tentative invitation to the Subcommittee by Dr. M. Elgabaly to hold the next Symposium in the UAR in 1972 was accepted.

*Acknowledgements*

Representatives from Australia, Peru, Portugal and the UAR spoke in appreciation of the organisation and success of the Symposium and the cordial hospitality of the Armenian people.

It is appropriate here to record the less official activities, such as the receptions at the Research Institute and Lake Sevan, the evening concert, and the farewell dinner given by the Armenian Ministry of Agriculture. These and visits to the many places of historic interest did much to make the meeting most enjoyable.

*Dr. J. K. M. SKENE*  
*Reporter-General for the Symposium*