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VOLUME II ABSTRACTS/RÉSUMÉS

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## Foreword

This Volume of the Proceedings (Volume II) includes all abstracts of invited and contributed papers received before May 15, 1959. It is intended to be used as an adjunct to the Program (Vol. I of the Proceedings).

In the Program the titles and authors of papers are listed in the sequence in which they will be presented, the program of each Section being given separately.

An Index to authors' names readily permits location of a specific paper.

In Volume II the abstracts are arranged alphabetically by authors' names with cross references where there is more than one author for a paper. By using the Program and Abstract Volumes together a member of the Congress can readily locate and read the abstract of any paper listed in the Program.

## Avant-propos

CE VOLUME II des Procès-verbaux contient tous les résumés des exposés sollicités et soumis qui ont été reçus antérieurement au 15 mai 1959. Il est destiné à servir de complément au Programme (vol. I des Procès-verbaux).

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Dans le Programme, les titres et auteurs des exposés sont classés dans l'ordre suivant lequel ils seront lus, le programme de chaque section faisant l'objet d'un groupement distinct. Un index des noms d'auteurs permet de trouver promptement l'emplacement d'un exposé donné.

Dans le volume II, les exposés sont disposés alphabétiquement par noms d'auteurs, avec renvois dans le cas où plusieurs auteurs ont signé le même article. Par l'emploi simultané du Programme et du recueil d'exposés, les Congressistes pourront rapidement retrouver et lire le condensé de tous les exposés qui figurent au Programme.

GORCHAKOVSKY, P. Academy of Sciences, Sverdlovsk. The Endemic and Relic Elements in the Flora of the Urals and Their Origin. The proportion of endemic elements in the Ural flora is not high, not a single endemic playing a leading role in the formation of plant communities. Most endemics are gradually dying out, only a few endemics being young species. The high-mountain endemics are classified into four principal groups: (1) endemics which have originated as a result of ecological and morphological differentiation and the disruption of the

areas of the plain-inhabiting ancestral species (concurrent with the alpine orogenesis) and consequent development of a series of vicarious species in separate mountain regions; (2) endemics which have originated as a result of transformation under the local conditions of high-mountain species which had immigrated from the other mountain regions in the Pleistocene; (3) endemics which have developed from plain-inhabiting species through adaptation to high-mountain conditions; (4) endemics of hybrid origin. Some of the mountain-steppe and rock-inhabiting endemics have obvious European bonds, while others have Asiatic bonds; a number of endemics are genetically allied to a series of kindred species inhabiting the mountains of Crimea, the Caucasus, and Asia. The relic elements are classified into five groups: (a) relics of the pre-glacial broad-leaved forests; (b) glacial relics inhabiting bare riverside rocks; (c) mountain-steppe and rock-inhabiting relics of Asiatic mountain origin; (d) Pleistocene high-mountain relics of Asiatic mountain origin; (e) Pleistocene relics of Siberian origin, characteristic mainly of the larch forests.