

3171

# ARBORETUM



# SOFRONKA

Pr. 3171

FORESTRY AND GAME MANAGEMENT  
RESEARCH INSTITUTE ZBRASLAV-STRNADY

ING. KAREL KAŇÁK, CSc.

# ARBORETUM SOFRONKA

STATION FOR PINE BREEDING



PRAHA,

CZECHOSLOVAKIA 1971

# Species and Provenances of Pines in Arboretum Sofronka

## Introduction Results in 1958 - 1968

### History

In connection with the solution of research projects on pine breeding in Czechoslovakia, the author found that the present trial plots and pine stands in various parts of our country are not sufficient for correct development of this work.

For that reason, it was decided to establish an arboretum with concentrated starting material, i. e., with available species of genus *Pinus* represented according to possibilities by a series of populations from various parts of their distribution area. A sample of such establishment and its use is the arboretum of 90 pine species at the Institute of Forest Genetics at Placerville established already in 1926.

Arboretum of populations was included into the consideration that the largest gen-pool of each species and provenance might be secured. There are some experiences with such type of arboretum (Les Barres, France) also in our country at Kysihýbl (Baňská Štiavnica, Slovakia, 3).

I. N. Vavilov (7) mentions that the breeder starting the work with a plant species should do best if he makes him acquainted with geographical deviations as soon as possible. For that reason we selected a series of populations of various provenances for the most important species.

On the basis of these main samples and principles we started with the ensuring of place for plantations and collections of seed samples in 1956. The first larger series of provenances of species *Pinus sylvestris* was sown in spring 1958. In this stage of work the most important condition of success was the kind help of colleagues from abroad who supplied me seed samples of species growing in their countries.

The plot for establishing the arboretum was found in the northern suburb of the town Plzeň in western Bohemia. It is situated in a recreation area on the beginning of large forests with many water areas in the elevation above sea level 330 — 350 m. near the highway Plzeň — Žatec — Dresden (latitude 49°46'N, longitude