Roadside vegetation in boreal South Yukon and adjacent Alaska*

by D. LAUSI and P. L. NIMIS, Trieste

with 3 photos, 11 figures and 10 tables

Abstract. This paper gives an account of a recent study (1983) of roadside vegetation along the main highways of Central and Southern Yukon (Canada) and Southeastern Alaska (USA). A sample of 101 phytosociological relevés from systematic sampling (1 relevé every 15 km) along the main roads crossing the survey area has been submitted to multivariate analysis. The results revealed that:
- The floristical variation in roadside vegetation is related to environmental differences among different portions of the survey area.
- The main factor underlying floristical variation in roadside vegetation is climate, chiefly precipitation.
- A definite correlation exists between the floristic composition of weed stands and adjacent natural vegetation. This is mainly due to the colonization of wastelands by native species occurring in adjacent natural stands, chiefly grasslands, xeric woods and forest edge.
- The ecological and compositional gradient is correlated with variation in the frequencies of different phytogeographical elements.
- Life-form types are correlated with climatic differences along the gradient.

Three community-types were recognized for the purpose of classification. These are geographical vicariants within the survey area.

Introduction

Man's impact on natural ecosystems has led to the creation of environments in which ecological conditions radically differ from the ones prevailing under the natural vegetation. In the temperate zone, anthropogenous environments are generally characterized by higher thermic ranges and a lower moisture regime than in the buffered microclimates of the climax vegetation. This causes the selection of a peculiar flora, with particular kinds of dispersal mechanisms, and of morphological and physiological features that are adaptations to the new niches available for plant life. Phenomena of adaptive radiation from ancestors growing in natural conditions brought the rise of new taxa, exclusively existing in man-

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