

Japanese flamboyant image about *Castanea* stands in satoyama and real situation. (Oral Presentation)

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Introduction

Castanea crenata (chestnuts) trees have been an important food source and their timbers have been used for constructions in Japan from the ancient time. There is a belief that many large *Castanea* stands had existed in satoyama (secondary forest created by human for a certain purposes) throughout Japan from the old time, but that almost all stands disappeared during the economic development in Japan especially for railway construction. Otaru, in Hokkaido is one of the places of it and a *Castanea* stand has been conserved recently.

Objectives

To reveal the time of the establishment of *Castanea* stand in Otaru region and the situation of *Castanea* stands in Japan during the railway construction.

Methods

Pollen analyses on the section samples from Temiya Park and recovered core near Oshorodoba Jomon site in Otaru were conducted. In addition to it, recent historical and statistical data were used to observe the change of the area of *Castanea* stands in Japan.

Results

The total area of *Castanea* stands was 71,000 ha which was much less than 1% of the secondary forest area in 1909. 84,526 ha would have been deforested after 50 years just for the railways. The total area decreased to ca 3500 ha by 1947 and recovered to ca 45,000 by 1980. Pollen analysis revealed the development of the present *Castanea* stand in Otaru region and indicated that *Castanea crenata* came to Otaru region during the Early Jomon Period (7000-4500BP).

Conclusion

It is partially true that *Castanea* stands disappeared due to the railway construction, but many large *Castanea* stands had not existed throughout Japan. The *Castanea* trees in Otaru were first introduced during Jomon Period, but large *Castanea* stand had not existed. There was little possibility that large *Castanea* stands existed in Otaru region from Jomon period to the early 20th Century and the present *Castanea* stand has been formed after the middle of the 20th Century. The real situation was not consistent to the common belief in Japan. Thus it is necessary to reexamine the existence of recent *Castanea* stands in Japan.

Keywords: railway construction, Otaru, pollen analysis

Selected References

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