

# Production of fruit planting material in the Republic of Srpska in the period 2009-2019

Nada Zavišić<sup>1</sup>, Jelena Davidović Gidas<sup>2</sup>, Svjetlana Zeljković<sup>2</sup>, Gordana Đurić<sup>2,3</sup>

<sup>1</sup>PI Agricultural Institute of Republic of Srpska, Banja Luka, Republic of Srpska, BiH

<sup>2</sup>University of Banja Luka, Faculty of Agriculture, Republic of Srpska, BiH

<sup>3</sup>University of Banja Luka, Institute of Genetic Resources, Republic of Srpska, BiH

## INTRODUCTION

The development and success of fruit production is conditioned by a number of factors, and one of the most important is the quality of planting material. The volume and structure of nursery production is defined primarily by the market, and in addition by the economic and biological characteristics of fruit species and varieties. In the Republic of Srpska, in the period from 2009 to 2019, a total of 23.103.920 fruit plants were produced.

The aim of this paper is to analyze the production of fruit planting material in the Republic of Srpska during a multi-year period (2009-2019). The total production of fruit plants was analyzed, as well as the production of fruit planting material by pomological groups of fruits, i.e. the production of pome, stone, berry and nut fruit species.

## MATERIAL AND METHODS

Data for production analysis was obtained from documentation generated in the process of production supervision by the authorised institutions. Professional supervision over the production of fruit planting material is performed by two authorized institutions, the Public Institution Agricultural Institute of the Republic of Srpska, Banja Luka and the Faculty of Agriculture, University of Banja Luka. Comparative analysis of fruit planting material production involves the tracking of changes in the percentage of fruit species and varieties in the production structure.

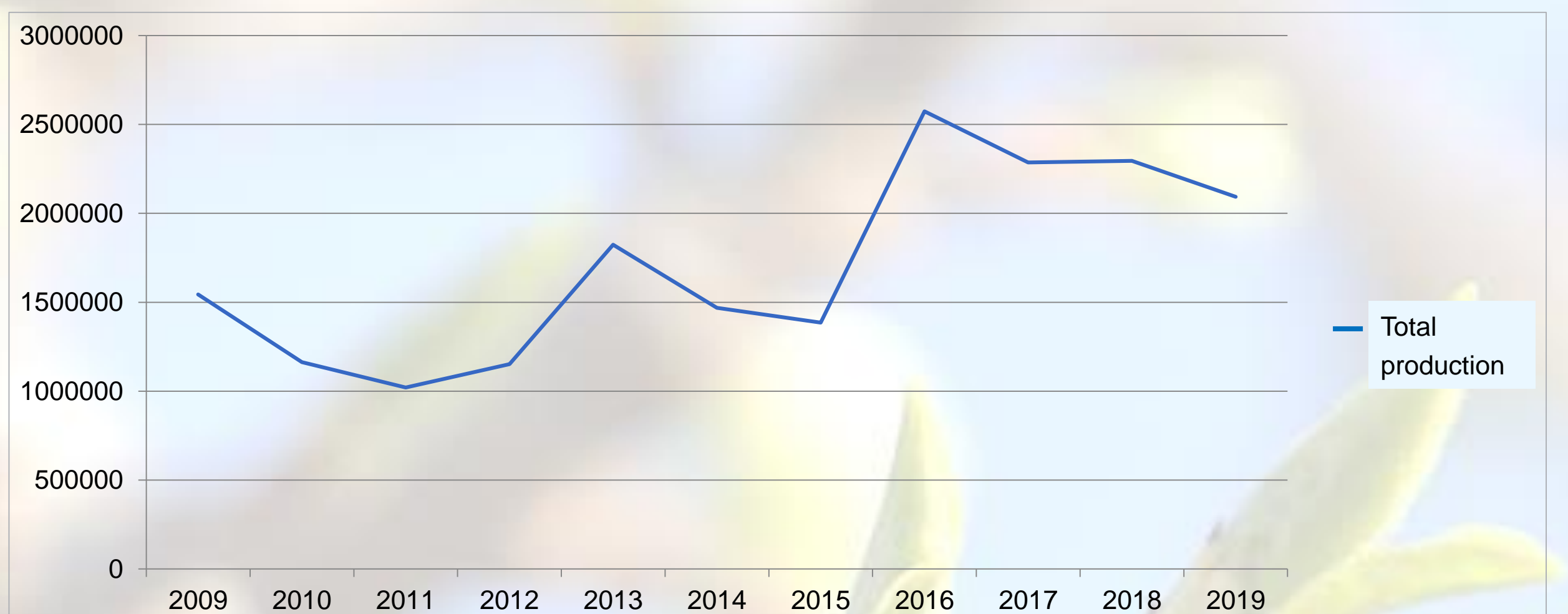
## RESULTS

Production of pome plants decreased significantly in the observed period (e.g. the share of pome plants dropped from 50% in 2009 to just 16.8% in 2019). The production volume of stone fruit plants was generally uniform, except in the case of sour cherry, whose production showed significant oscillations. There was a significant increase in production of berry fruits, mainly raspberry plants, with the maximum amount of plants recorded in 2016 (1,185,700). In addition to the increase in the amount of raspberry plants, there is also a significant change in the varietal structure, with the production of varieties 'Tulameen', 'Autumn Bliss' and 'Polka' in 2016, in addition to 'Willamete' and 'Meeker'. The expansion of the production of nut plants has been recorded in 2017, with the most common varieties being hazelnuts 'Istarski dugi' and 'Rimski', accounting for about 70% of production..

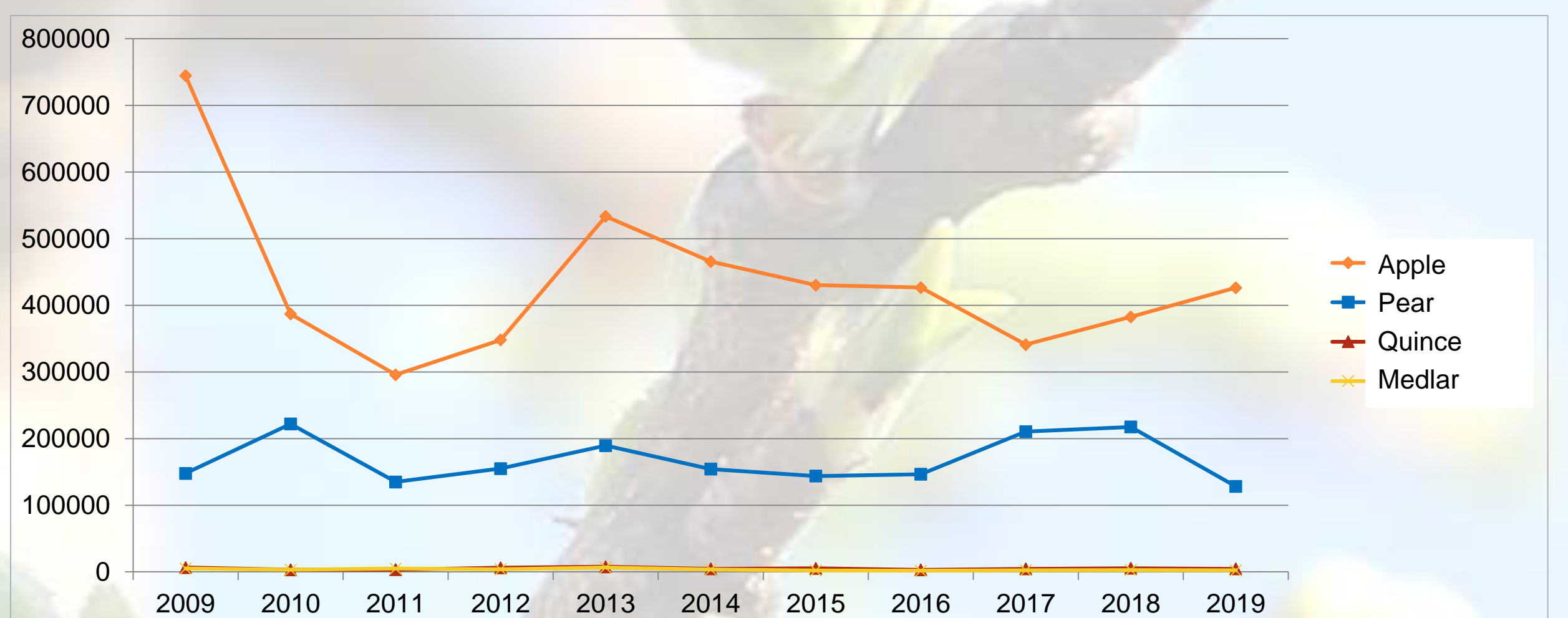
## CONCLUSIONS

The analysis of the ten-year data showed that there has been a significant change in the volume and structure of fruit planting material production. The total number of fruit plants produced in 2009 was 2.447.480, and in 2019 2.314.795. Pome fruit planting material production had significant decrease over the observed period, while berry and nut planting material increased its share in total production. The percentage of stone fruit planting material remained at approximately the same level.

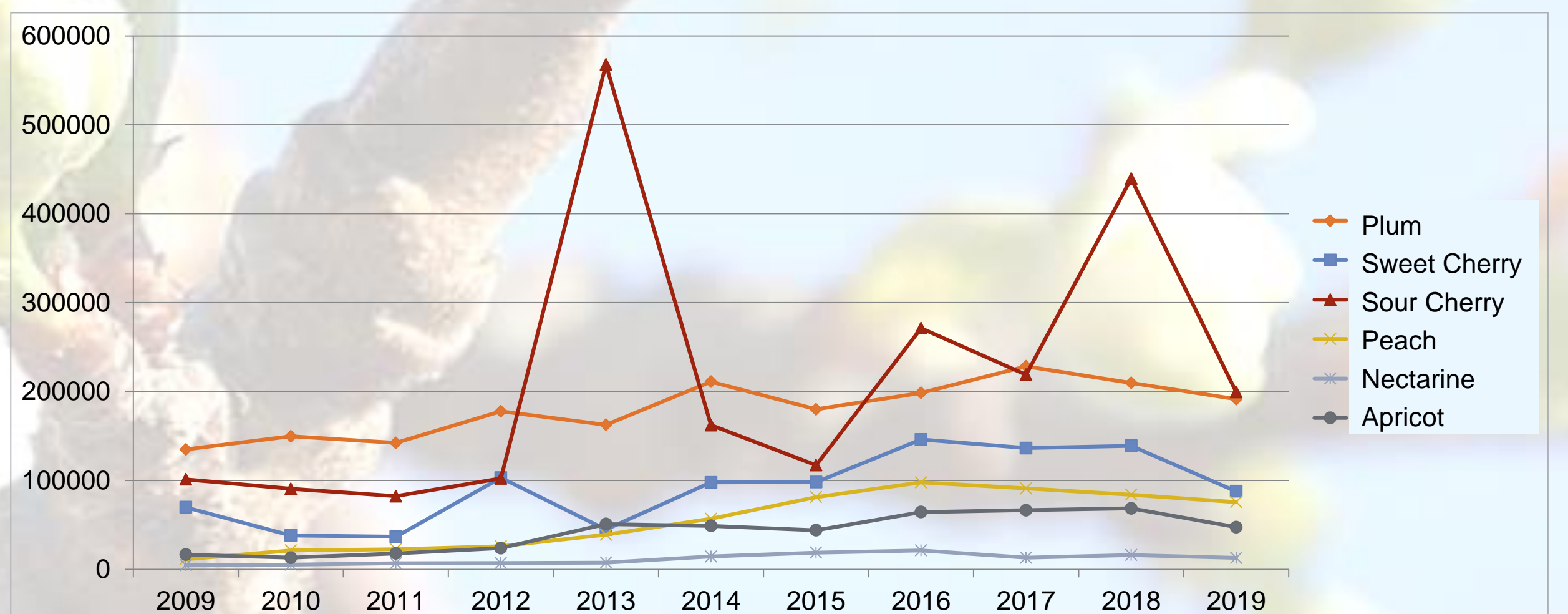
Graph 1. Total production of fruit planting material in the Republic of Srpska in period 2009-2019



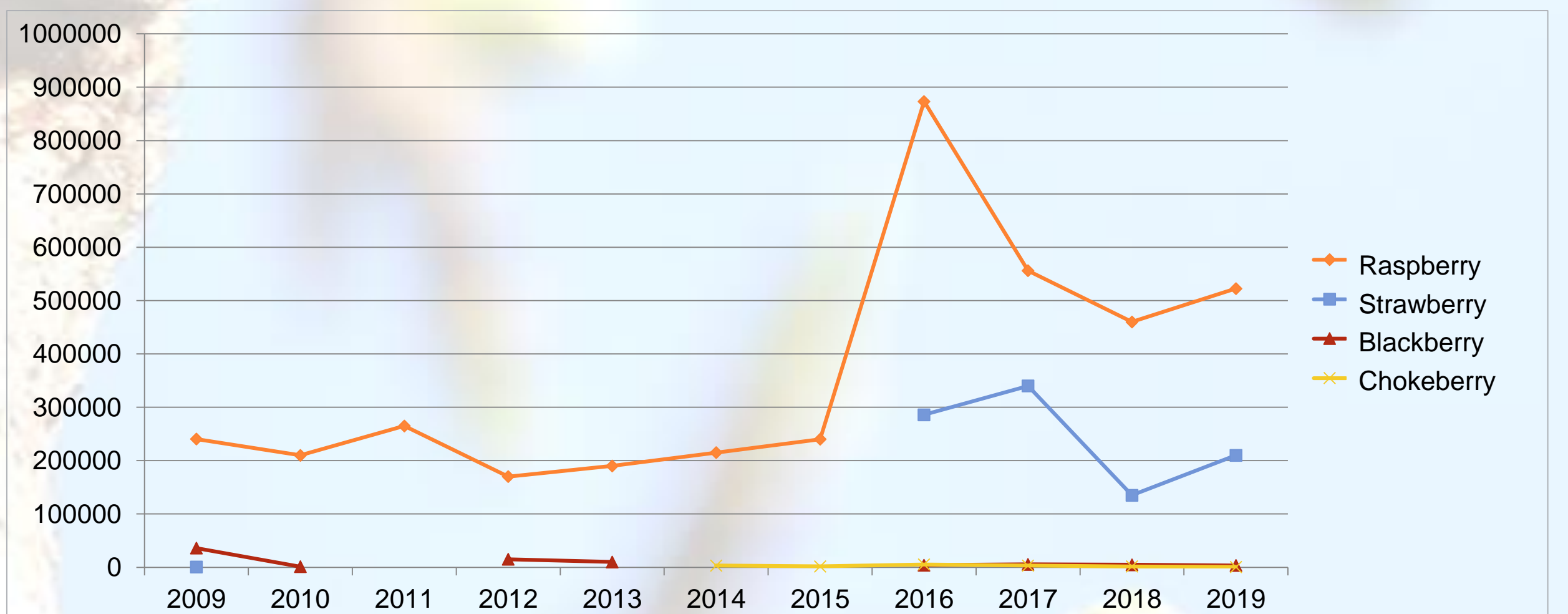
Graph 2. Pome fruit planting material production dynamics in the Republic of Srpska in period 2009-2019



Graph 3. Stone fruit planting material production dynamics in the Republic of Srpska in period 2009-2019



Graph 4. Berry fruit planting material production dynamics in the Republic of Srpska in period 2009-2019



Graph 5. Nut fruit planting material production dynamics in the Republic of Srpska in period 2009-2019

