

I am Elisa Corvatta and I am attending the Master's degree course in Food System Management at the University of Bologna. I am a dynamic, passionate and accurate student, always eager to learn what matters from each experience.

Thanks to the win of RPLC scholarship, I have been in Oregon (USA), at the Oregon State University. I have been working within the agricultural policy research group, along with other PhD students and experts.

This period in the United States has enriched me a lot, both from the professional and personal point of view. As a matter of fact, I have built relationships and interacted with different professors, growers and business owners. All this has increased my flexibility and the reliance on my personal skills.

My work will be a review about the current uses of hazelnut shells in Italy and Oregon (USA) in order to provide extensive information about potential valorization routes assessing their environmental and economic impacts.

Methodologically, an international comparative analysis between the two countries will be used, interviewing both Italian and Oregonian hazelnut companies owners and growers.

Italy is the second largest producer of hazelnuts in the world, while Oregon State is in third place. This year, USDA estimates indicate a production of around 52,000 tons of hazelnuts. So, the volume of possible byproduct valorization is extremely interesting.

In the last few years, Oregon hazelnut production is boosting and Oregon State University is playing a significant role in breeding new hazelnut varieties with higher yield. Higher production will lead to higher growers income, lowering also operational costs. Moreover, selling hazelnut shells would be a source of revenue. As a matter of fact, they can be used to make compost, bio-combustible, garden pathways, composite materials, animal feed ingredient.

Regarding new paths in reutilizing hazelnuts shells, they can be used to make cat litter, biochar or water filters. Biochar would be the higher value added product.

For all these reasons, I would recommend agricultural policies encouraging these new paths for hazelnuts shells reutilization, as well as burning them as bio-combustible to run the facility or in order to produce heat for hazelnut roasting.

This represents a smart way to reduce manufacturing costs and thus improve the competitiveness of businesses in the global economy.

Finally, I would suggest closer agreements between growers and processors. Growers should receive one-on-one guidance, on-site support, and carried chemical and fertilizer costs from any agricultural supplier until after harvest. To complete the package, higher prices in the industry should be offered.

In conclusion, I hope that my research will be useful for future improvements in the hazelnut production, supporting a more sustainable supply chain and alternative farmers' income.