

## COMPARISON OF PHENOLIC COMPOSITION AND ANTIOXIDANT CAPACITY IN FRUITS OF THE WHITE STRAWBERRY *FRAGARIA CHILOENSIS* SPP., *CHILOENSIS FORM CHILOENSIS* OF TWO CHILEAN LOCALITIES

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At present, there has been a great interest in producing foods that provide beneficial effects on human health. As a result, many native fruits have been studied for being a great source of antioxidants and functional foods. Agriculture has the purpose of producing high quality foods with beneficial potential for health, such as antioxidant compounds that can avoid the free radicals involved in oxidative stress. Chilean strawberry (*Fragaria chiloensis* ssp., *chiloensis f. chiloensis*) is an endemic wild species, native to southern Chile. The *Fragaria chiloensis* is distributed in the center and south of Chile and has a low consumption within Chile and a low impact on the external market. However, the antioxidant activity and part of the phenolic composition of extracts of this species have been analyzed by some authors resulting to be a fruit with high capacity. This work focuses on the content of ellagic acid and ellagitannins found in white strawberry fruits (*Fragaria chiloensis* spp., *chiloensis form chiloensis*) of two Chilean localities. The identification and quantification of phenolic compounds (anthocyanins, ellagic acid and ellagitannins) of

white strawberry was made from a water/methanol/formic acid extract and through HPLC-DAD. The results show that the major compounds in Chilean strawberry were the derivatives of ellagic acid and ellagitannins, besides it is observed that the two localities do not have differences in the contents of these compounds. Also, anthocyanins, specifically cyanidin-3-O-glucoside, pelargonidin-3-O-glucoside and cyanidin-malonyl-glucoside were also detected. From these preliminary results, we can assure that the *Fragaria chiloensis* turns out to be a promising fruit that offers benefits to the human health.

### Biography

Felipe Noriega is a Biochemist who graduated from the University of Concepción and is pursuing his Master's Degree in Agricultural Sciences with a mention in Plant Production and Protection at the same university. He worked as a Research Assistant at the Biotechnology Center of the University of Concepción. He has published an article in a reputed journal.

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