The objective of this study is to determine the carbon dioxide (CO\textsubscript{2}) emissions due to fossil-based input usage during the cultivation of apple, rose and cherry in Isparta. To this end, data obtained previously via survey method have been used. Using the industry-based inputs of these products, chemical fertilizer and pesticide amounts used per unit area along with machinery usage times and fuel consumption amounts have been determined. The total energy equivalents of these amounts were determined, and the carbon dioxide emission equivalents to the used energy amounts have been calculated.

According to the evaluation results, the total fossil-based energy consumption amounts for apple, rose and cherry cultivation have been actualized, respectively, to be 38038.8 MJ, 23660.3 MJ and 18282.7 MJ. Depending upon these consumed energy amounts, the respective determined carbon dioxide emissions were 2474.0, 1591.5 and 1222.6 kg CO\textsubscript{2}eq ha\textsuperscript{-1}. Depending on the usage of fossil-based energy input, the highest carbon dioxide emission was determined for apple, followed by rose and cherry. Usage of chemical fertilizers related to nitrogen consumption has dramatically affected the total carbon dioxide (CO\textsubscript{2}) emission for all three products (carbon dioxide emissions
per kg apple, rose and cherry: 0.08, 0.32 and 0.16 kg
CO₂).