# ABSTRACT

## THE OLIVE MILL WASTE WATER PROBLEM IN AYDIN PROVINCE AND THE EVALUATION OF OLIVE MILL'S PREFERENCES FOR SOLUTION

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As a result of the olive oil production, two different type of waste generated, one of them is Olive Mill Wastewater (OMWW), is directly discharged to the nature from past to present. But in recent years, this type of discharge increasing with different reasons and this happen come with a serious environmental problem. Because of untreated discharged OMWW which includes extremely high organic loaded aqueous waste has been threaten the environment. At present, this waste has not been evaluated economically because of its high cost of treatment unfortunately it makes more difficult to managing. In fact, olive oil firms in Aydın where the olive produced intensively, threaten the environment as one of the addressed position in this subject. The aim of the present study includes; why the OMWW characterized as a problem, evaluating the sensitivity of olive oil producers to the nature, the choice of the producers when solving this problem and producers` express a willingness to paying cost of the revisions which are suggested by the government. Related to these aims, a study conducted as based on face to face conversation with olive oil manufacturers in Aydın and analyzing

data with using contingent valuation method, lower bound mean, new environmental paradigm method and chi square tests. At the end of the result; 51% of the olive oil manufacturers are willingness to pay 6 965 TL (be accepted 10 ton/day) to a ecological systems transformation was detected. However within the under the research in terms of common available or using capacities (60 ton/day and 40 ton/day) to a ecological systems transformation the amount of manufacturers are willing to pay 28 780.34 TL and 19 186.89 TL as calculated. Furthermore, the result of chi square test showed that, personal companies and the firms whose main interest of area is olive oil, express a willingness to paying cost less than the others. But when increasing the capacity of the companies, the express willingness to paying cost increasing too. On the other hand there are no relationships with express a willingness to paying cost and varied data such as to be active in a different industry, compensation of operating cost status in the related year, education level and experience of firms. As a result of this research, within the context of new ecological paradigm, firms` ecological attitude calculated as 3,52 and ecological sensitivity of the firms determined as moderate. Ecological attitude of the firms related to OMWW calculated as 3.14 and it established that they have less sensitivity than the usual ecological attitude. For eliminating of OMWW, first three choices of the olive oil firms are, using both as irrigation water and as fertilizer, directly discharge of the nature (receiving environment) and regional gathering.

**Key words**: Olive Mill Waste Water, Olive Oil Tecgnology, Contingent Valuation Method, Willingness to pay, NEP (New Ecological Paradigm), Aydın.