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## **MONITORING COMPOSTING PROCESS OF OLIVE BY-PRODUCTS AND ASSESSMENT OF COMPOST MATURITY**

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### **Abstract**

Olive growing occupies a key position in the Moroccan economy. Generally, 65% of olive production is destined for crushing. This operation was accompanied by the generation of two by-products: Olive mill wastewater (OMW) and olive pomace (OP), the quantities of which depend on the crushing process. The composition of these by-products in organic and mineral elements helps to valorize them as compost. Some physical-chemical parameters such as pH, temperature, organic carbon and nitrogen are monitored during the composting process until stabilization after three months. The maturity of the products obtained was evaluated by the phytotoxicity test (germination index) on the germination of cress, the E4/E6 ratio, and the respirometric test. The final substance is mature and stable from the 11th week, rich in fertilizing elements (N, P, K), non-toxic and conforms to the French standard for organic amendments NF 44-51.

*Key words:* amendment, composting, olive mill wastewater, olive pomace, valorization

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