Arab Gulf J. Scient. Res. **11** (3), pp. 377 - 390 (1993)

Polyphenol Oxidase Activities and Properties in Some Potato *(Solatium tuberosum)* Varieties Produced in Saudi **Arabia**

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ADSIKA< r. Since polyphenol oxidasc (PPO) plays the key role in eir/ymatic browning of potatoes, five potato varieties produced in Al-Kharj region. Kingdom of Saudi Arabia, were evaluated for PPO activity. Wide variations in PPO activities among the different potato varieties were found. Ajax potato variety was very low in PPO. Extensive cultivation of low PPO potato varieties should he encouraged. Characteristics of potato PPO extract were also investigated. The temperature and pH optima for the enzyme were 30-40°C and pH 7. respectively. Heat stability studies indicated that a complete inactivation of PPO occurred at 80°C for 30 mm. Regarding the effect of inhibitors on the enzyme, sodium metabisulfite and ascorbic acid were the most effective, whereas sodium chloride and EDTA were the least.