

## **Study of physicochemical and kinetic features of peroxidase isolated from hoary cress (*Cardaria draba* L.)**

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### **Abstract**

New peroxidase may be versatile was investigated in different parts of hoary cress. Roots regarded as a rich source of enzyme (2095.23 U mg<sup>-1</sup>) comparison in other botanical parts. Peroxidase was purified from roots by ammonium sulfate, dialysis and Sephadex G-100 gel filtration, showed final degree of purity and recovery 2.70 and 54.11% respectively. Molecular mass, optimum of pH, temperature and time of enzymatic reaction were 56.234 kDa, 6.5, 40°C, 3 min. respectively.  $K_m$  and  $V_{max}$  were estimated of each substrate (guaiacol and hydrogen peroxide), noticed high affinity to hydrogen peroxide. Competitive sodium azide inhibitor was suppressed peroxidase totally at 90 mM.