

ABSTRACT**RAPID BIOASSAY FOR PESTICIDE RESIDUE USING SOL GEL
MATRIX**

5 The present invention relates to a rapid bioassay for determining pesticide residue in a sample, in particular, the development of a novel biosensing material based on sol gel encapsulation with enzyme for detection of pesticide residue. Enzymatic inhibition activities showed that the response of the biosensing material to pesticide residue were reproducible and the enzyme-doped sol gel monolith was stable under storage at 4° C and economically viable.