

**Toxicity and metabolic fate of the fungicide carbendazim in the
typical freshwater diatom *Navicula* sp.**

Tengda Ding ^{*}, Wen Li, Juying Li ^{*}

Shenzhen Key Laboratory of Environmental Chemistry and Ecological Remediation, College of
Chemistry and Environmental Engineering, Shenzhen University, Shenzhen 518060, China

*Corresponding Author: Tengda Ding, College of Chemistry and Environmental
Engineering, Shenzhen University, Shenzhen 518060, China

E-mail: dingtengda@szu.edu.cn

Juying Li, College of Chemistry and Environmental Engineering, Shenzhen
University, Shenzhen 518060, China

E-mail: jyli@szu.edu.cn

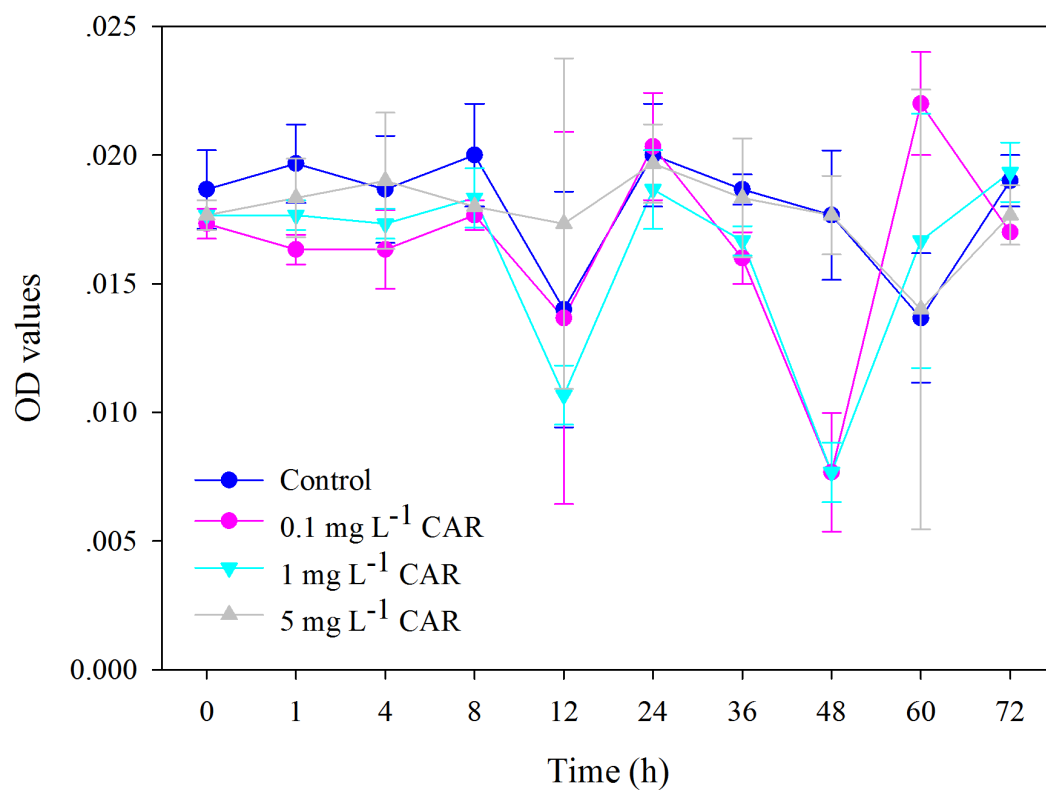


Figure S1 The variations of algal growth rate under the CAR exposure at different incubation time

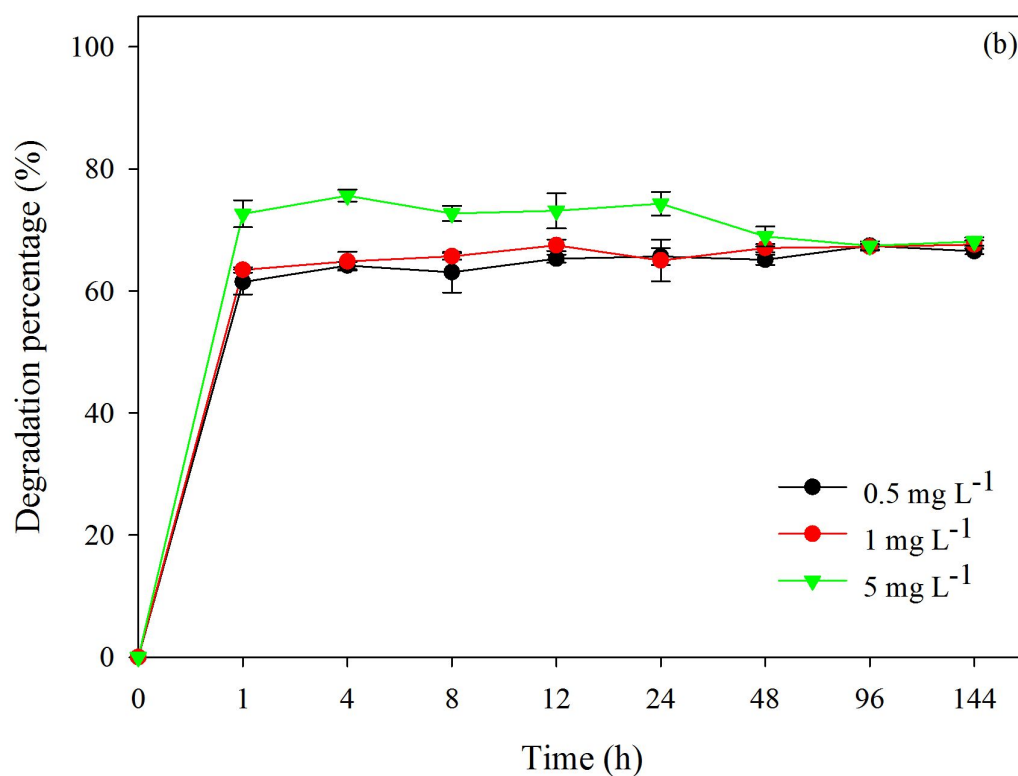
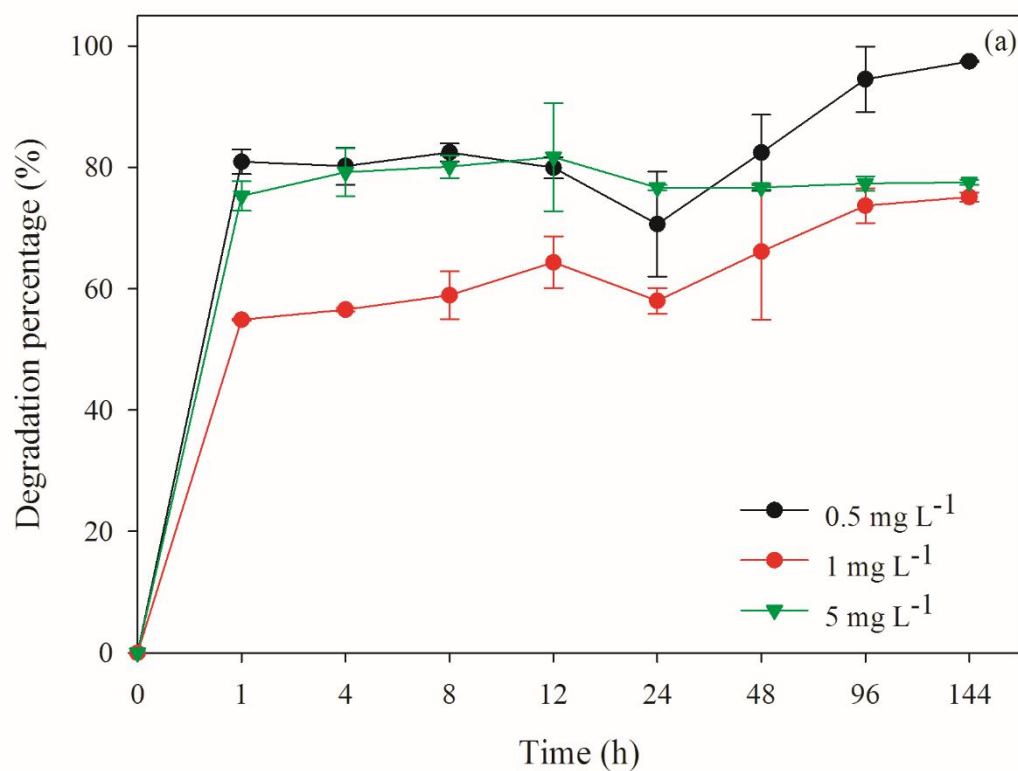


Figure S2 The degradation percentage of CAR in pure medium (a) and *Navicula* sp. culutres (b) during the incubation time

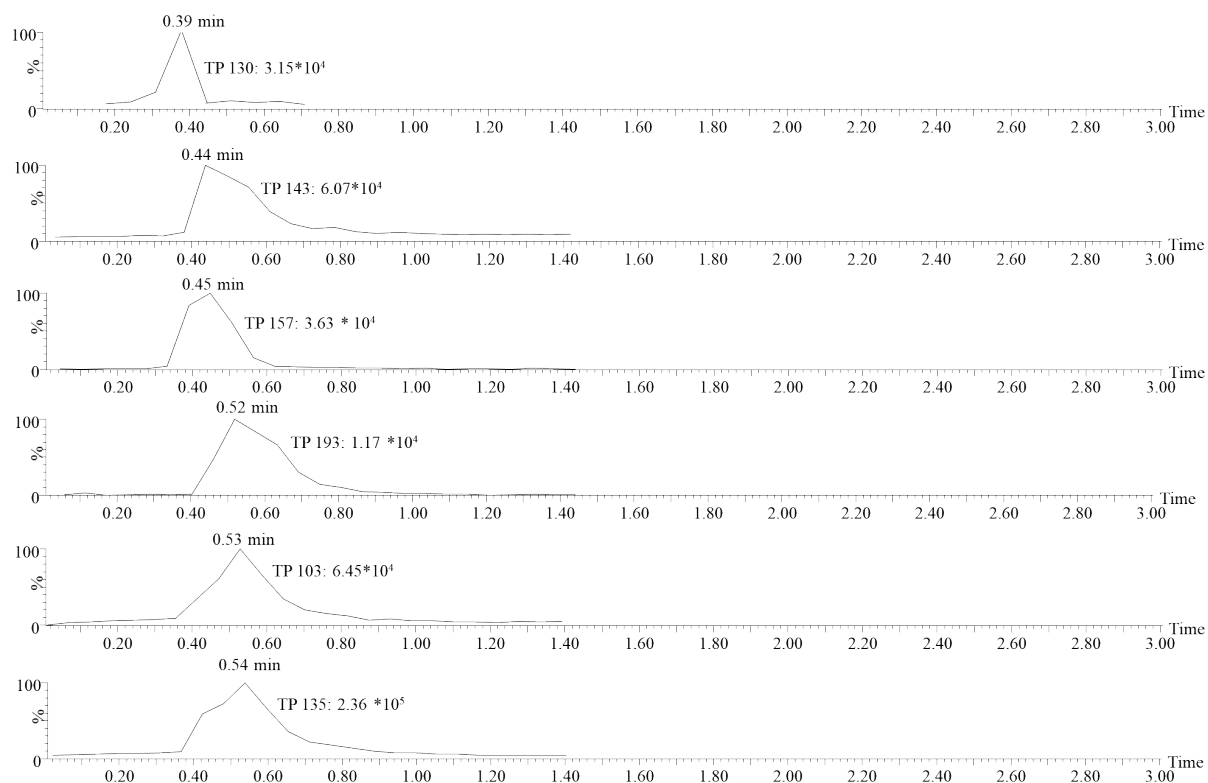


Figure S3 Chromatograms of CAR metabolites in *Navicula* sp. cultures with initial CAR concentration of $500 \mu\text{g L}^{-1}$

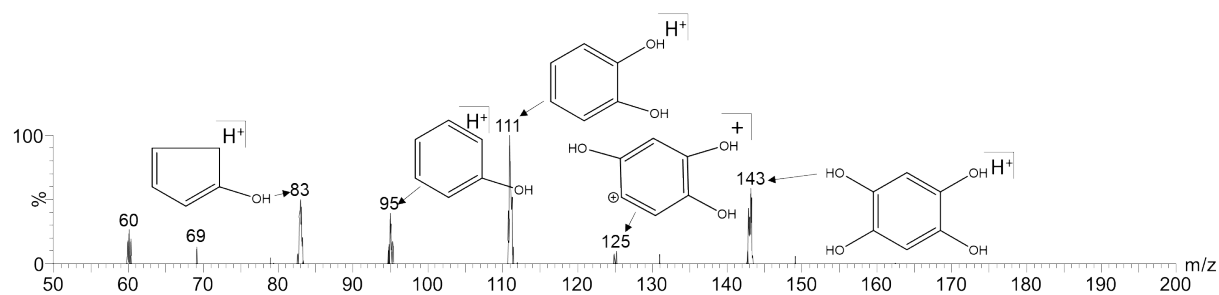


Figure S4 MS spectra in the identification process of TP 143 in *Navicula* sp.

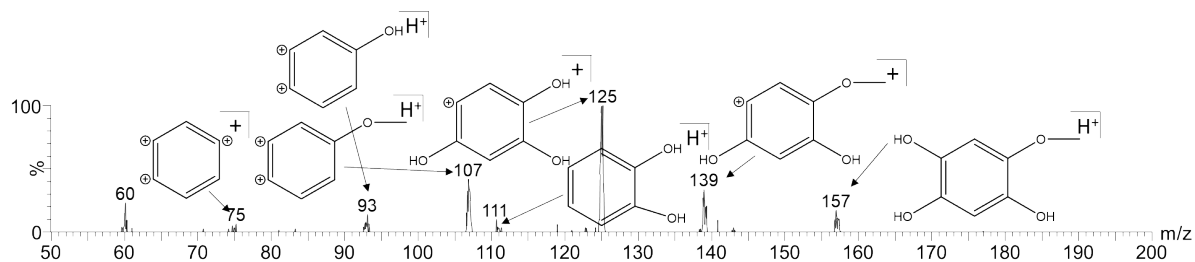


Figure S5 MS spectra in the identification process of TP 157 in *Navicula* sp.

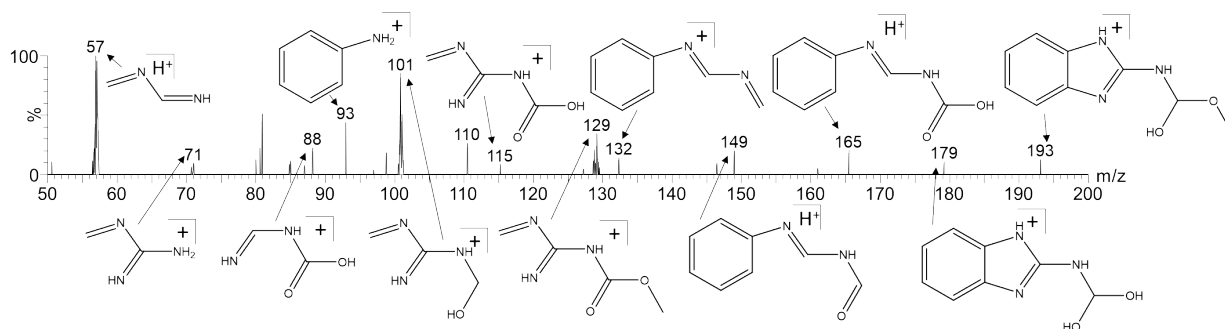


Figure S6 MS spectra in the identification process of TP 193 in *Navicula* sp.

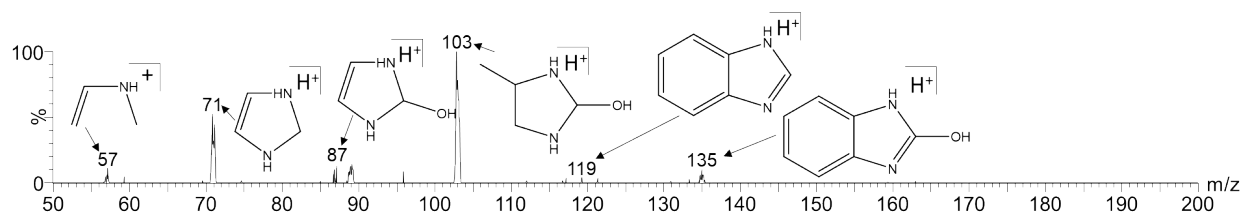


Figure S7 MS spectra in the identification process of TP 135 in *Navicula* sp.

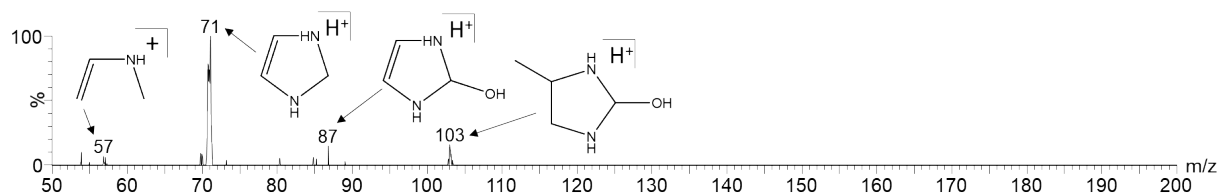


Figure S8 MS spectra in the identification process of TP 103 in *Navicula* sp.

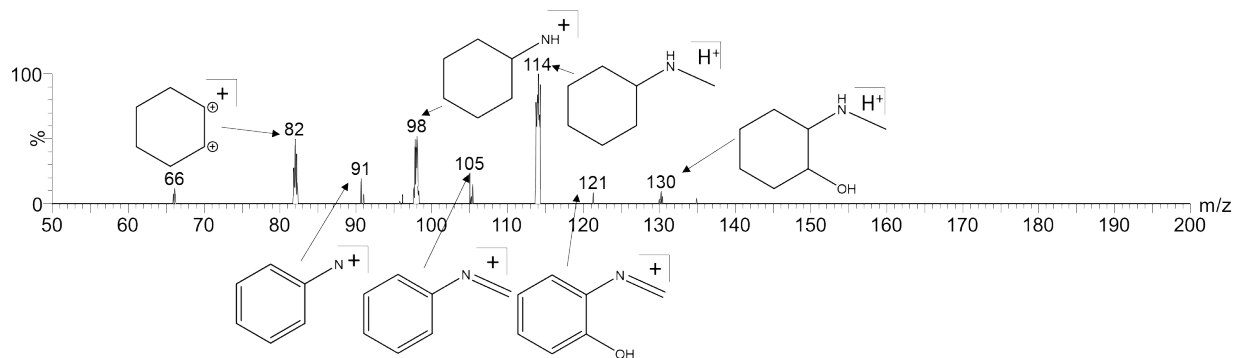


Figure S9 MS spectra in the identification process of TP 130 in D1 medium

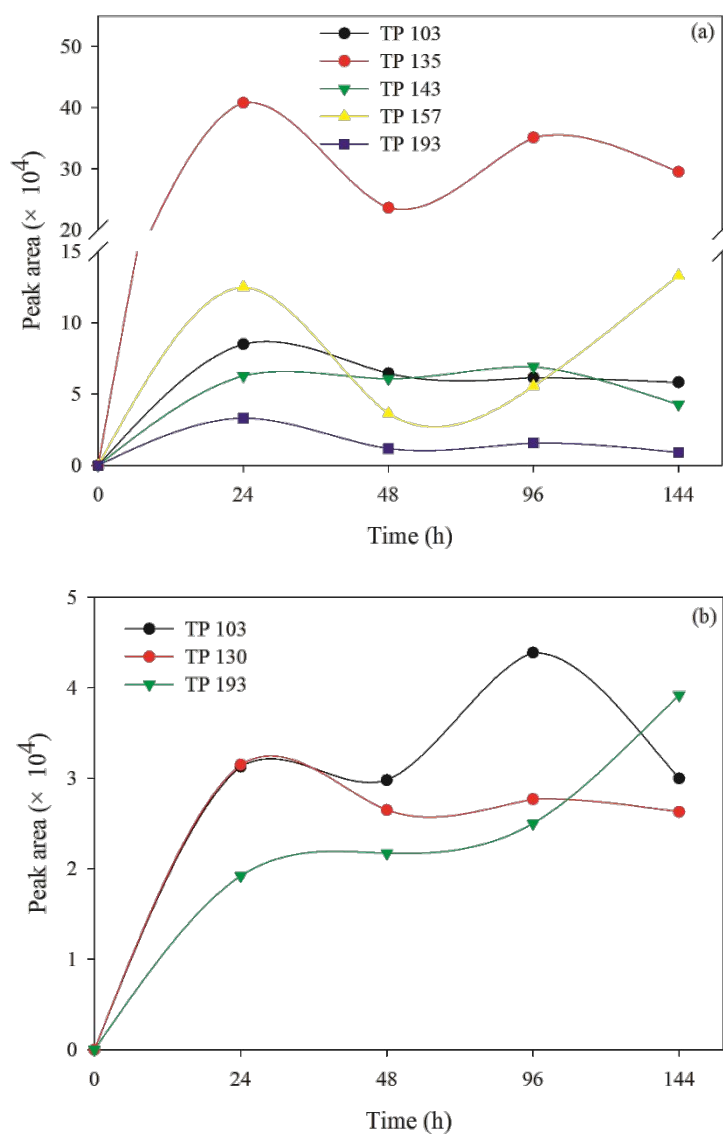


Figure S10 The peak area kinetics of CAR metabolites in *Navicula* sp. cells (a) and D1 medium (b) during 144 h of incubation