

New Photodegradation Products of the Fungicide Fluopyram: Structural Elucidation and Mechanism Identification

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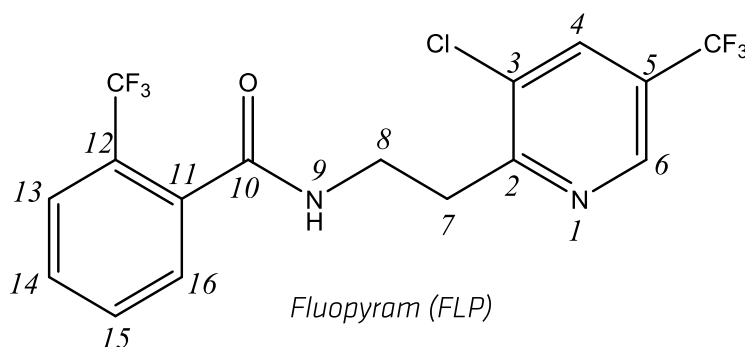


Figure S1. Chemical structure of fluopyram (FLP)

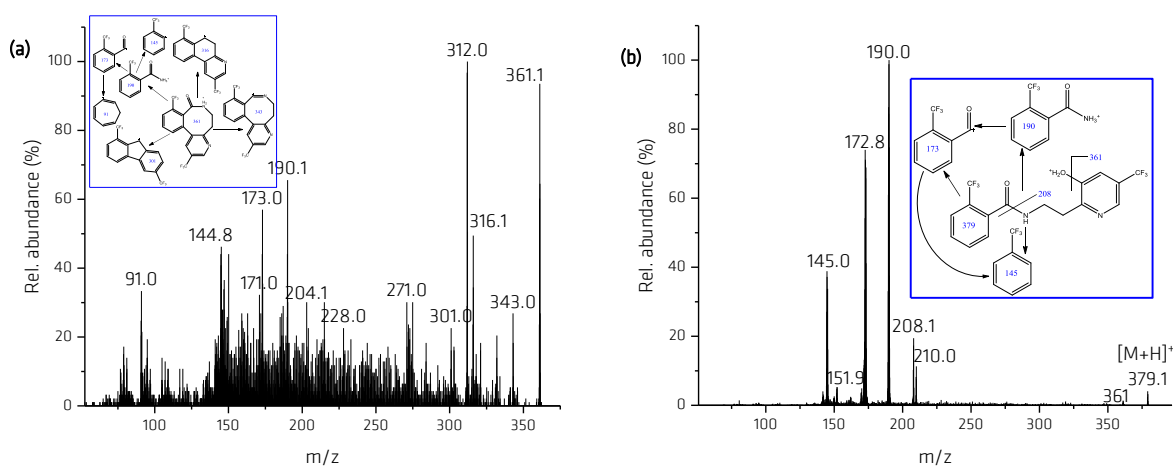


Figure S2. MS/MS spectra of P10: lactam (a) and P3: hydroxyl-dechlorinated (b) FLP photodegradation products and their proposed fragmentation pattern

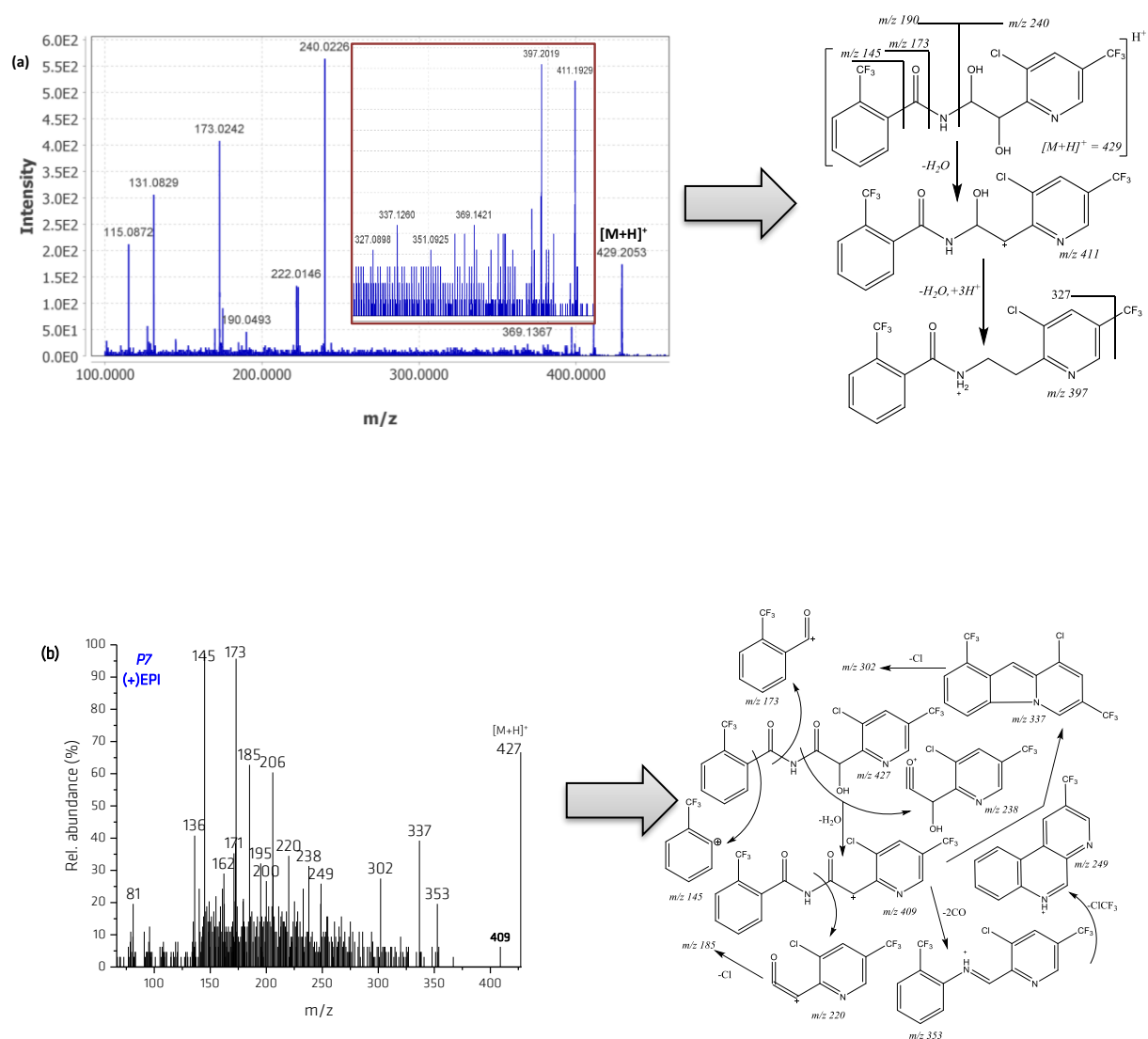


Figure S3. MS/MS spectra of P9: dihydroxyl (a) and P7: hydroxyl imide (b) FLP photodegradation products and their corresponding proposed fragmentation pattern

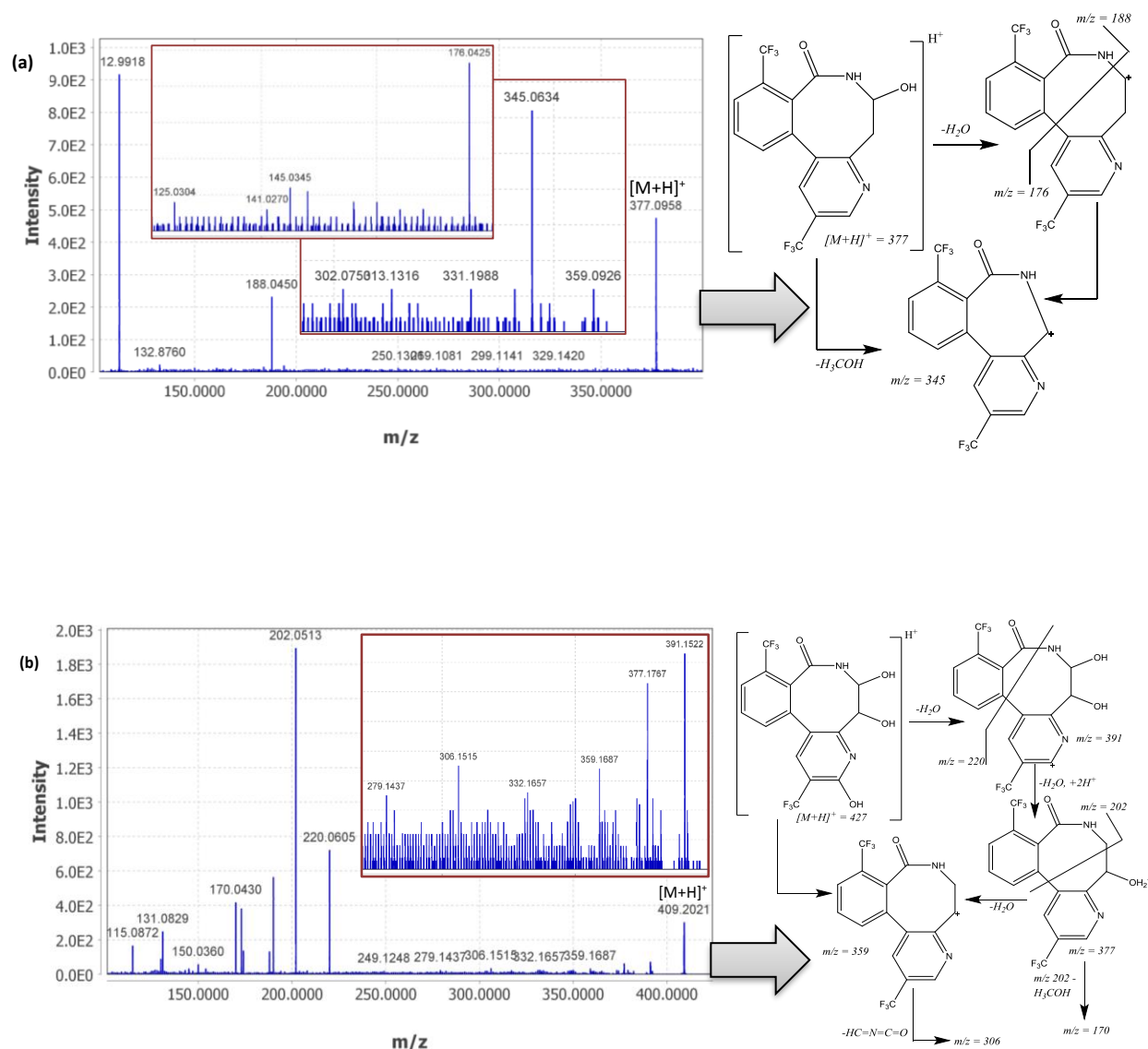


Figure S4. MS/MS spectra of P11: mono- (a) and P5: trihydroxyl (b) lactam FLP photodegradation products and their corresponding suggested fragmentation

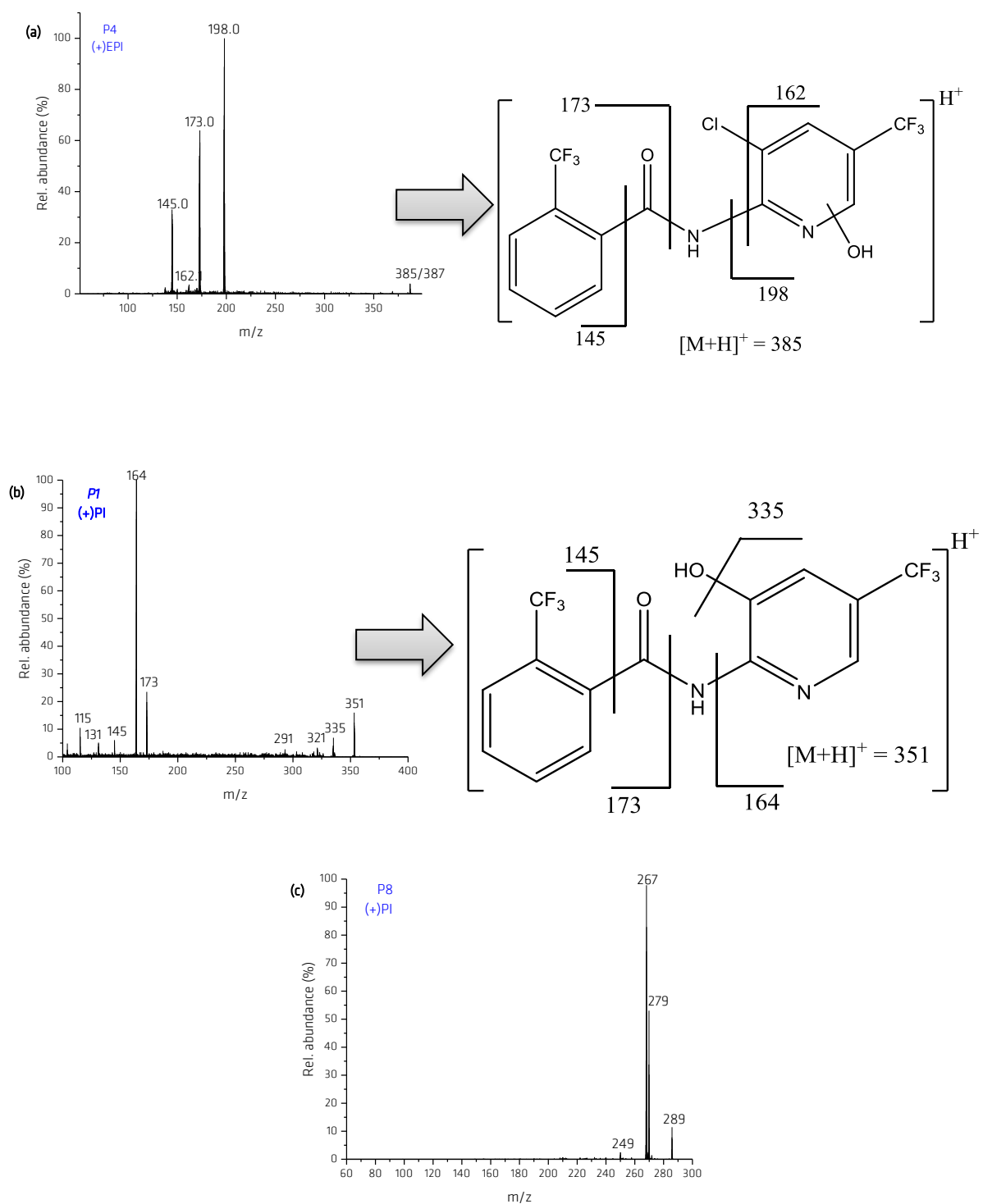


Figure S5. MS/MS spectra of P4 (a), P1 (b), and P8 (c) formed by rearrangement and their proposed fragmentation mechanisms

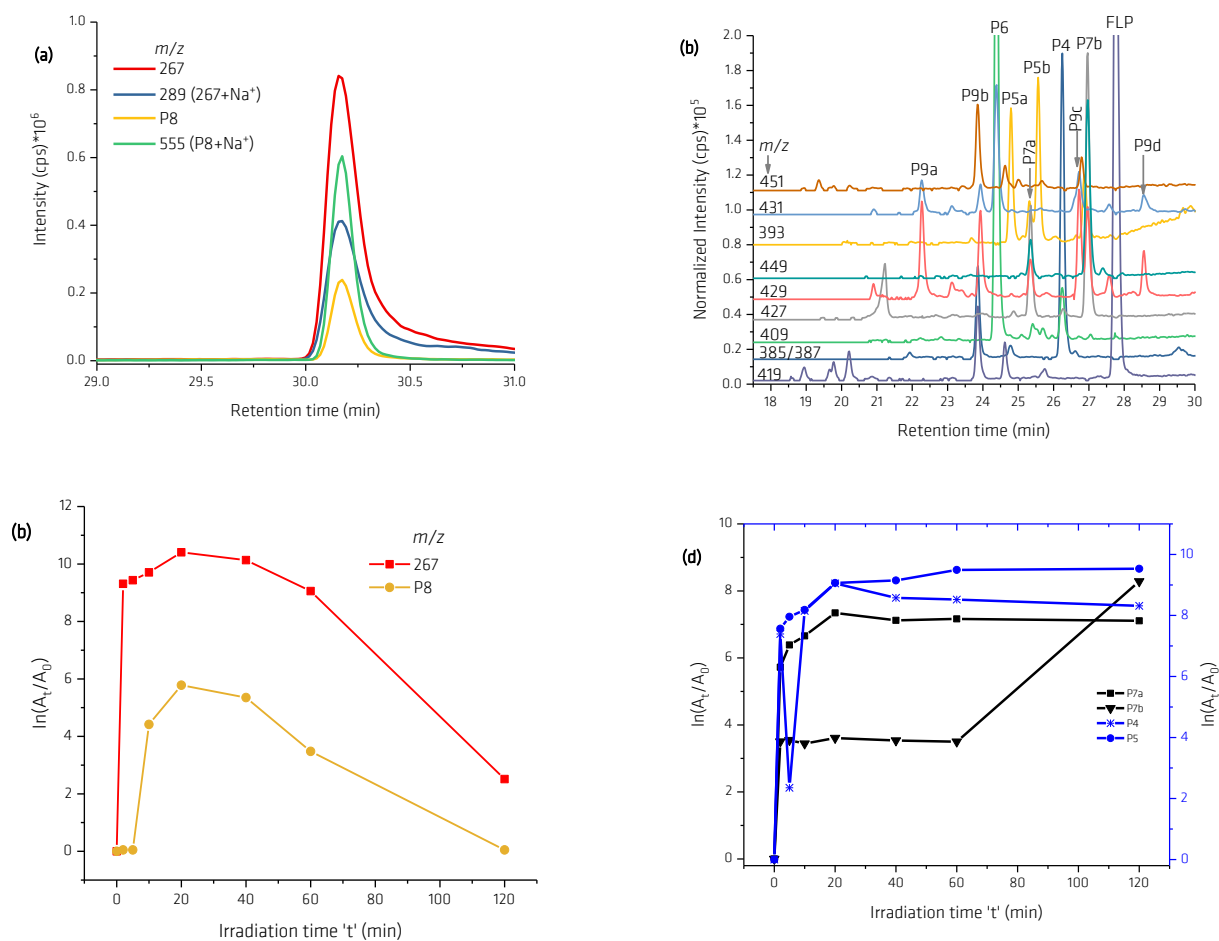


Figure S6. EIC of P8 and m/z 267 with their respective Na⁺-adduct (a), EIC of selected TPs (b), kinetics of P8 and m/z 267 (c), and P4, P5, and P7 (d). The y-axis, $\ln(A_t/A_0)$, in (b) and (d) represents natural logarithm of peak area ratio of each PP after irradiated for time 't' (A_t) to before irradiated (A_0) by considering a constant unity at $t = 0$.