

**BfR**

Risiken erkennen – Gesundheit schützen

MS/MS Parameters of Pesticides

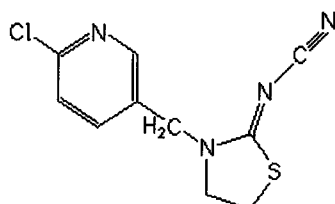
Analyte: Thiacloprid

CAS No.: 111988-49-9

Formula: C₁₀H₉ClN₄S

Molecular mass (lowest isotopes): 252,02 amu

Structure:



Ionisation: ESI +

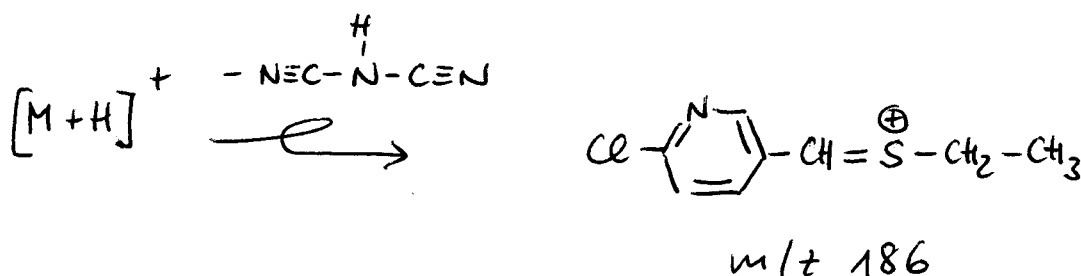
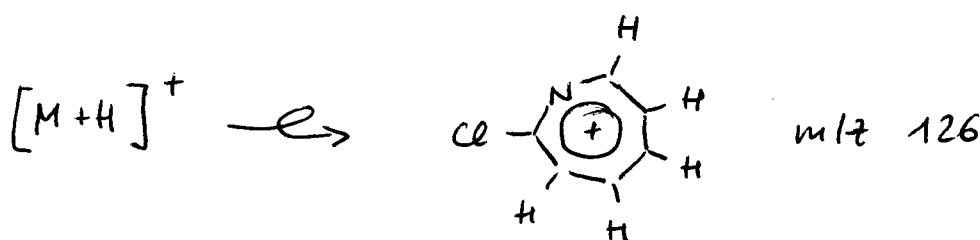
Quasimolecular ion: 253,0 amu = [M+H]⁺

Analyte sensitive parameter set (API 2000)

Transition	253,0 → 126,0	253,0 → 186,0
Declustering potential (DP)*)	79 V	79 V
Focusing potential (FP)	320 V	360 V
Entrance potential (EP)	12,0 V	12,0 V
Collision cell entrance potential (CEP)	18 V	18 V
Collision energy (CE)	29 V	19 V
Collision cell exit potential (CXP)	6 V	10 V

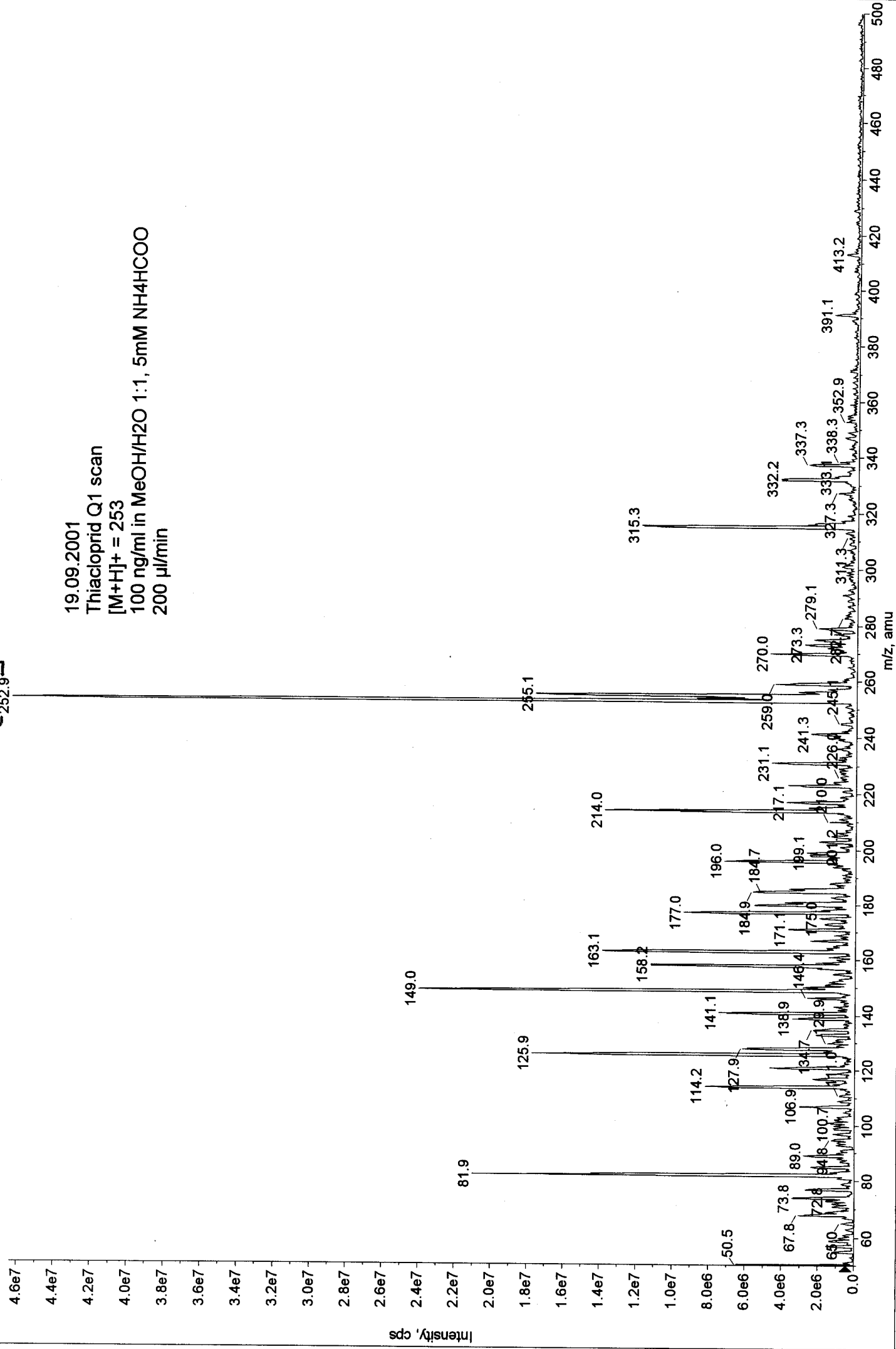
*) For API 3000 and 4000 enhance DP by 20V

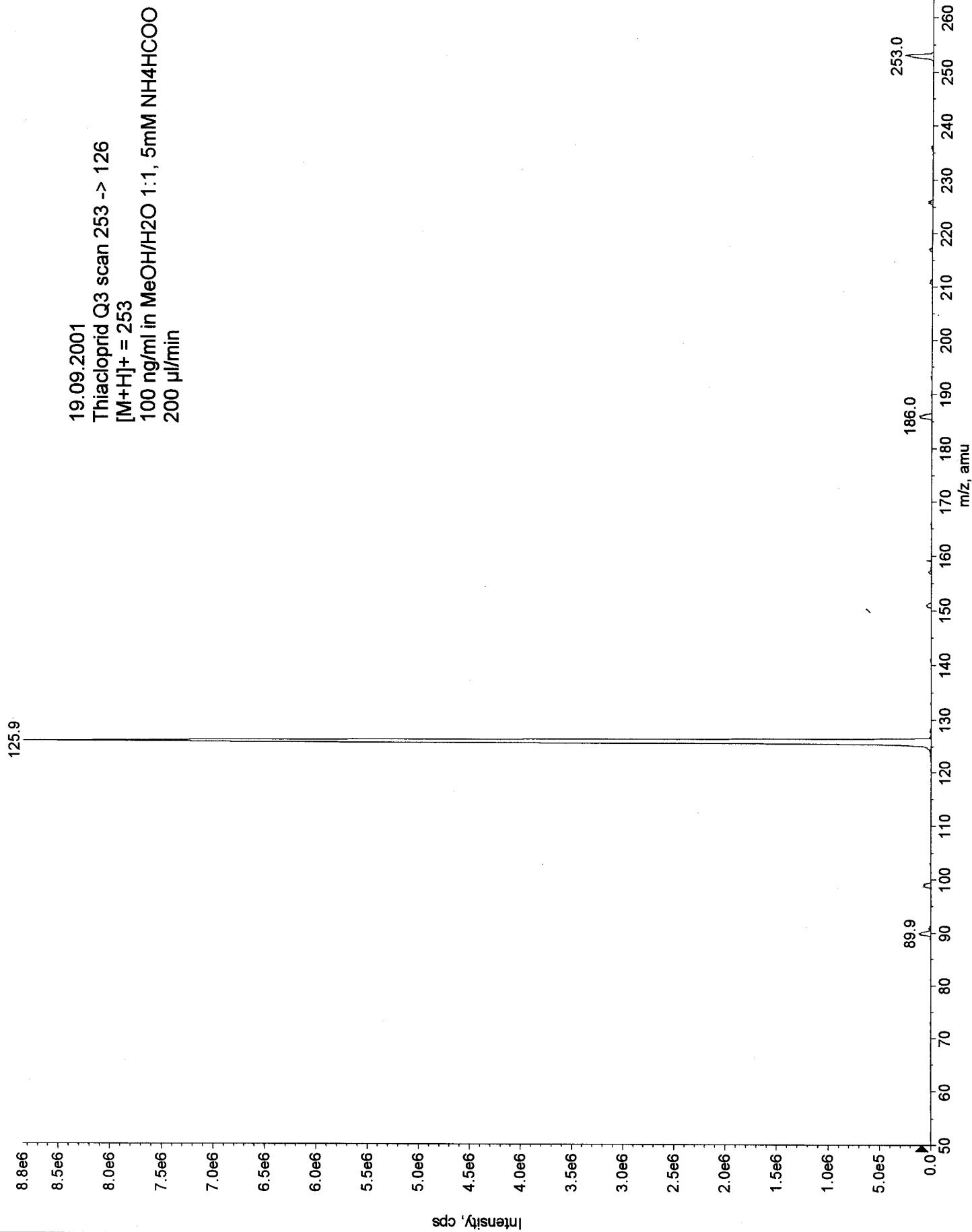
Fragmentation



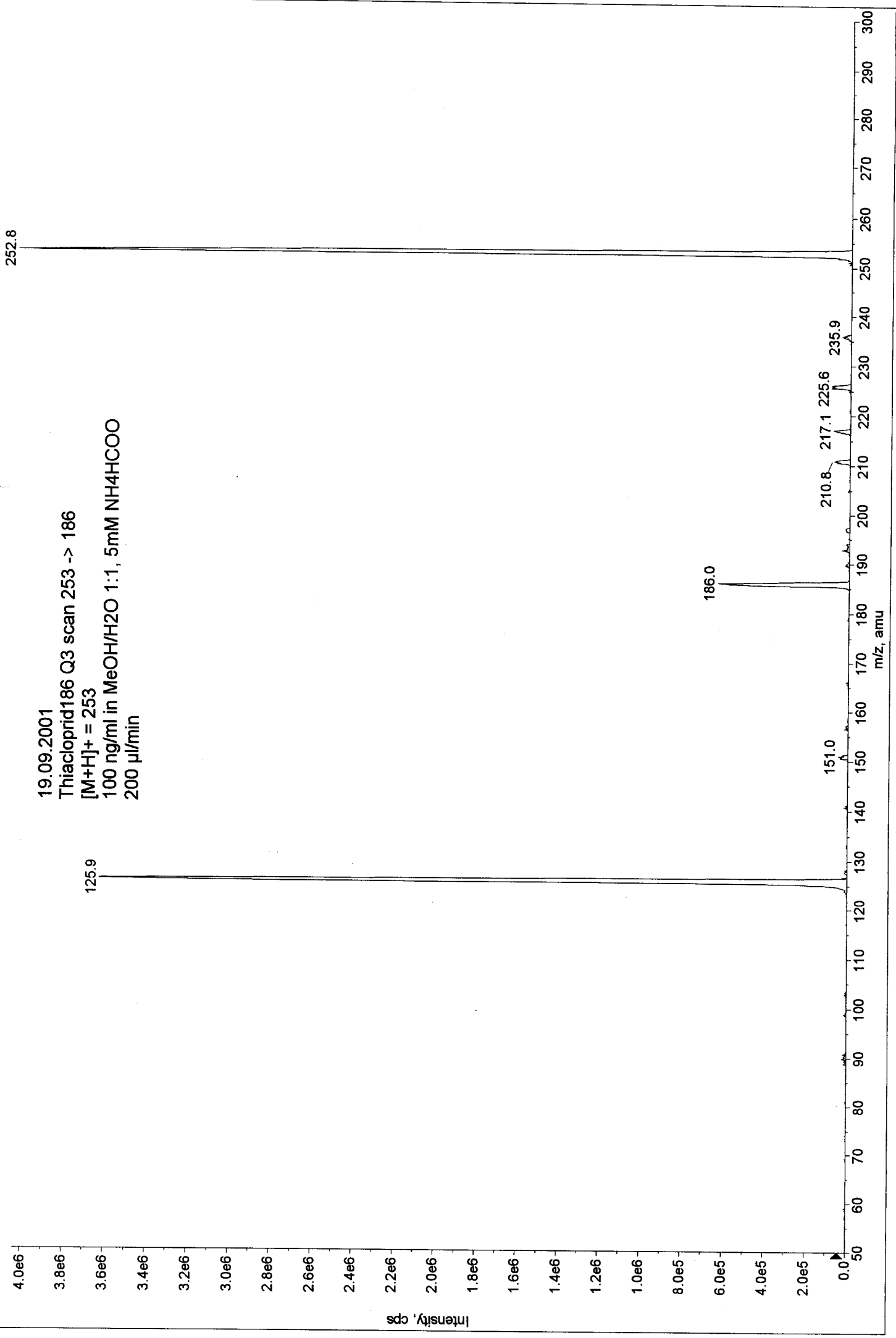
$[M+H]^+$
252.9

19.09.2001
Thiacloprid Q1 scan
[M+H]⁺ = 253
100 ng/ml in MeOH/H₂O 1:1, 5mM NH₄HCOO
200 µl/min

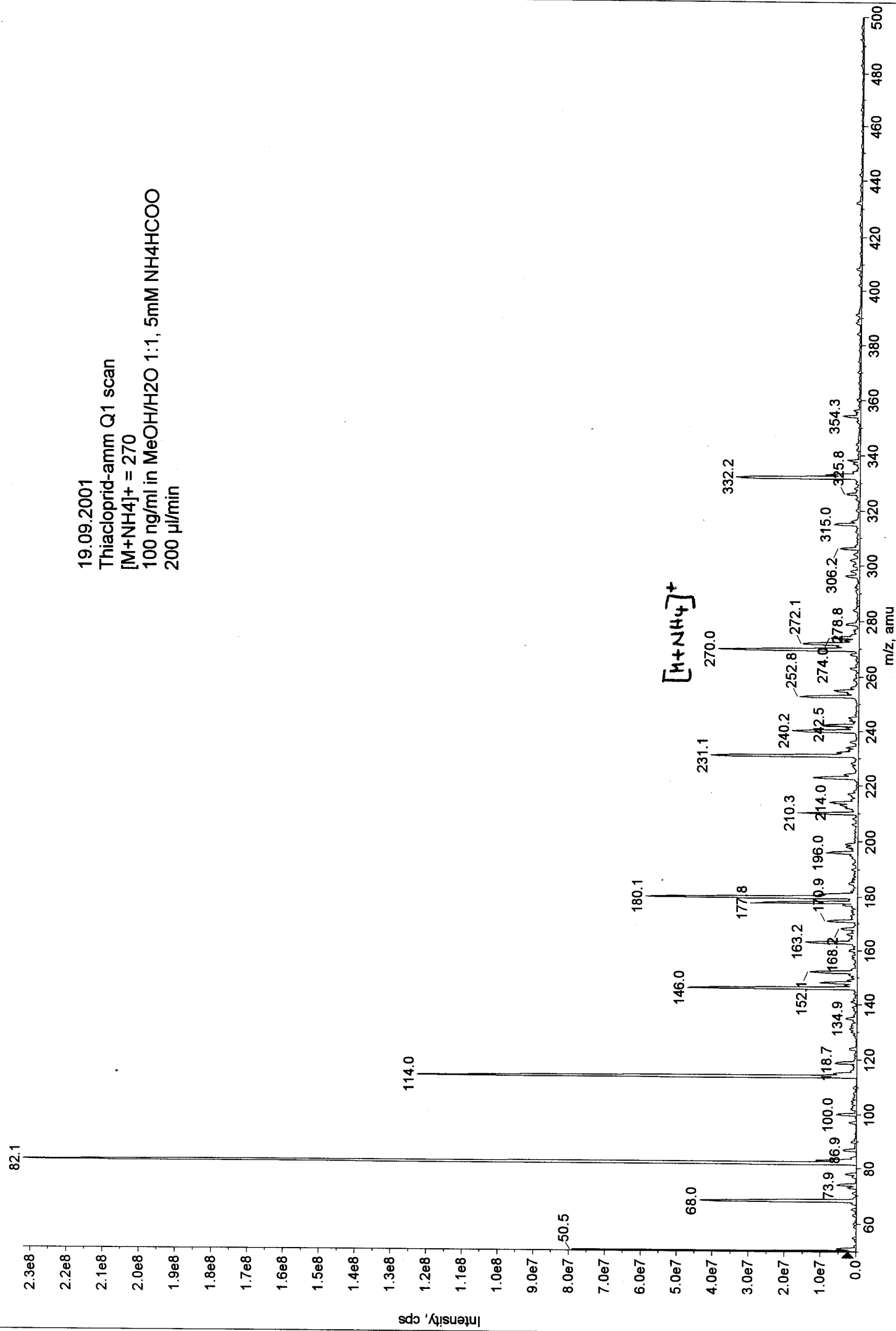




19.09.2001
Thiacloprid186 Q3 scan 253 -> 186
[M+H]⁺ = 253
100 ng/ml in MeOH/H₂O 1:1, 5mM NH₄HCOO
200 µl/min



19.09.2001
 Thioclopid-amm Q1 scan
 [M+NH4]⁺ = 270
 100 ng/ml in MeOH/H2O 1:1, 5mM NH4HCOO
 200 µl/min



19.09.2001
Thiacloprid-amm Q3 scan 270 -> 126
[M+H]⁺ = 253 / $C_{7H_7}NH_4J^+$ = 270
100 ng/ml in MeOH/H₂O 1:1, 5mM NH₄HCOO
200 µl/min

