

RAPID METHOD FOR ANALYSIS OF CHLOROACETANILIDE AND CHLORONITROPHENOXYANILINE HERBICIDES BY GAS CHROMATOGRAPHY

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SUMMARY

The herbicides Alachlor and Aclonifen are recently used in France for pre-emergent weed control in corn, essentially in association. For this reason, an improved method has been developed by gas chromatography for simultaneously characterising and quantifying the two herbicides. The best conditions were obtained by using a gas chromatograph equipped with an ion trap detector, and a 30 m x 0.25 mm DB-1701 fused silica capillary column. Retention times of Alachlor and Aclonifen were 12.8 and 23.2 min respectively. The limit of detection was of 2.0 ppb for each herbicide.

Key words: herbicides, Alachlor, Aclonifen, gas chromatography

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