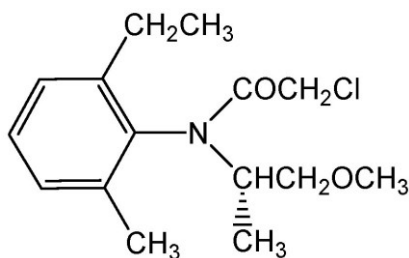


CIPAC STATUS REPORT

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0607 S-Metolachlor

Allocated to CHIPAC

CIPAC methods published in: CIPAC Handbook -

CIPAC

CIPAC 68th meeting, June 2024 Wageningen

S-Metolachlor by Ms Junhua Song (5394, 5395)

Ms Junhua Song presented the results of a small scale collaborative trial of S-metolachlor in two TC samples and three EC samples in which three Chinese laboratories participated. The analysis was performed by high performance liquid chromatography on a Daicel CHIRALPAK AY-H (250 mm Å~ 4.6 mm Å~ 5 µm or equivalent) at 30 Å~C with UV detection at 230 nm and external standardization. The eluent was heptane : ethanol, 94:6 (v/v) at a flow rate of 0.6 ml/min. All laboratories used the same column. However, the retention times of the individual four isomers differed considerably.

E.g. the retention time of the S1 isomer for lab 1 was 14.8 min (at a flowrate of 0.5 ml/min), for lab 2 was 12.9 min and for lab 3 was 16.6. Comparable differences for the other three isomers were obtained. No outliers were identified and HorRat values ranging from 0.25 – 0.28 for the sum of the two S-isomers were obtained for all samples.

Ms Junhua Song considered the method applicable for the determination of the S-isomer percentage in S-metolachlor TC material and EC formulation. A full scale collaborative trial was proposed.

Questions and remarks from the meeting.

- The formula of the S-metolachlor should be corrected
- Two different reference standards were used. Why?
 - Will be double checked after the CIPAC meeting
- The retention times of the different isomers differed considerably between the laboratories. Is an explanation available?
 - Will be answered after the CIPAC meeting
- The title of the presentation ('5395/R Small scale collaborative trial for the determination of S-isomers ratio in S-metolachlor TC and EC') is not correct as during the small scale collaborative trial the combined content of both S-metolachlor isomers was validated, not the ratio between the S-isomers.

Closed meeting:

The comments and remarks were answered during the open meeting, however some clarifications remain. After the clarifications have been received the method can proceed to full scale trial.