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MINISTERIO
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 **INIA**
Instituto Nacional de Investigación
y Tecnología Agraria y Alimentaria

WHY USE CALCIMETER METHOD AND NOT TITRATION METHOD FOR MEASURED CARBONATES ?

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FutMon + ICP Forests Meeting
Working Group on QA/QC in Laboratories
Meeting of the Heads of the Laboratories

12-13 October 2009, Warsaw (Poland)



DETERMINATION OF CARBONATE CONTENT

- + NOT Used Method SA07 - ICP-Forest
- + Use Titration Method
 - ✧ Sample + 10 ml HClO₄ (1N)
 - ✧ Heat a 300°C ⇒ 2 min
 - ✧ Cool ⇒ + 150 ml H₂O distilled
 - ✧ Titration with NaOH (0.5 N)
- + 6th Ring Test Soil
 - ✧ Overestimated carbonates
 - ✧ Sample C ⇒ mean = 10 g/kg
 - ✧ Range 0-23 g/kg
 - ✧ Lab Spain = 29 g/kg
- + 5th Ring Test Soil not overestimated
 - ✧ Sample C ⇒ mean = 148 g/kg
 - ✧ Lab Spain = 173 g/kg



DETERMINATION OF CARBONATE CONTENT

- ✦ Another lab use Titration Method
- ✦ Another Lab has same problem with exceed carbonates



THANK YOU



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