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**OBJECTIVE:** to evaluate the effect to liming and three sewage sludge doses applied in different dates on Ca evolution (soil and pasture), in a silvopastoral system established in a very acid soil with *Pinus radiata* D. Don after a pasture was sown

**Located:** San Breixo Forest Community (Guitiriz, NW Spain)

### MATERIAL AND METHODS

**Elements studied:**

**Methodology:** in October 1999, when the forestry plants were one year old, an experiment was established in 39 (13 treatments x 3 replicas) experimental units of 12 x 8 m

**Treatments:** NF: No Fertilization treatment

Lime plots (2.5 Mg ha<sup>-1</sup>) and Unlimed plots

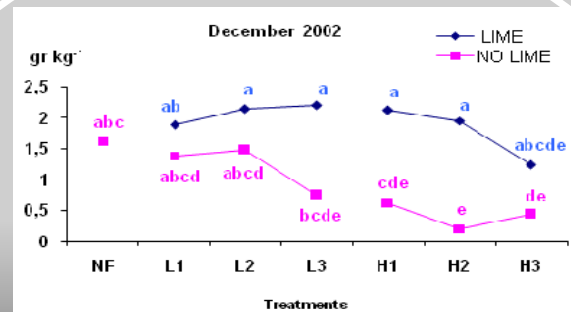
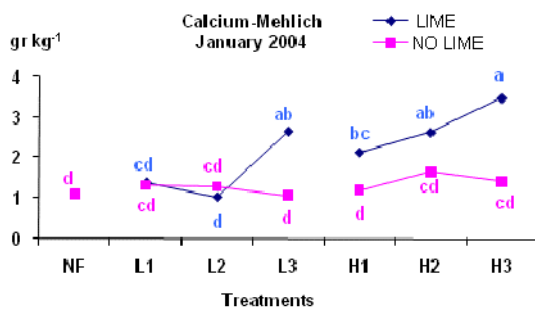
- L1: 50 kg total N ha<sup>-1</sup> (February)
- L2: 50 kg total N ha<sup>-1</sup> (March)
- L3: 50 kg total N ha<sup>-1</sup> (April)
- H1: 100 kg total N ha<sup>-1</sup> (February)
- H2: 100 kg total N ha<sup>-1</sup> (March)
- H3: 100 kg total N ha<sup>-1</sup> (April)

Ca evolution in soil and pasture

## Results

### Soil

### Pasture



LIME+HIGH DOSE OF SEWAGE SLUDGE IN APRIL

LIME+LOW DOSE OF SEWAGE SLUDGE

Ca-Mehlich

Ca concentration in the pasture

### Conclusions

**The application of lime and doses of sewage sludge increased the Ca concentration in the soil and in the pasture, especially when the date of fertilization was late.**