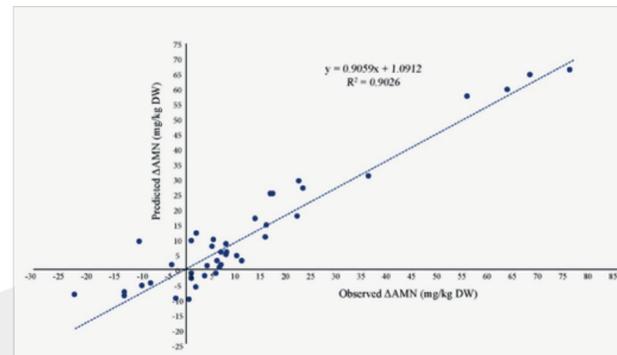


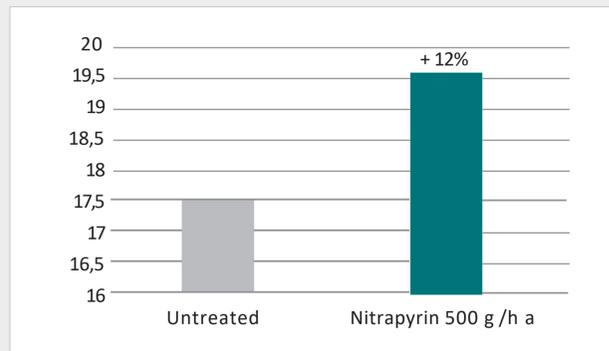
Nitrapyrin helping farmers to get more value of slurry and increase silage production on dairy farms in Italy and Germany

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Regression between observed and predicted values from N_MODEL

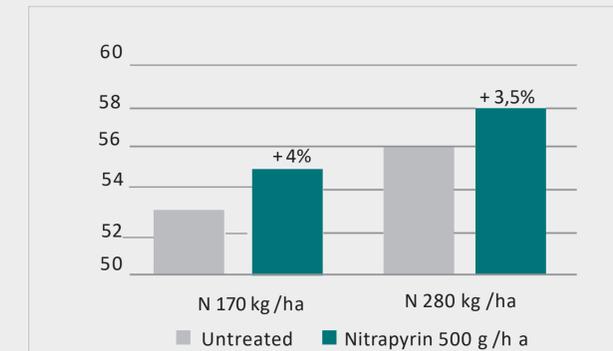
Slurry is always a byproduct in animal production. Historically farmers never perceived the value of slurry as a fertilizer as equal to mineral fertilizers. Using nitrogen stabilizers such as nitrapyrin helps farmers to increase the value of a slurry as a fertilizer used for forage production. Field trials carried out in 2012-2018 were focused on checking nitrogen retention in soil, corn development and yield.



Dry matter yield in t/ha, data from 2012-2013, (N=10), Germany

In 165 locations in Italy we performed in-field comparisons between nitrapyrin treated and untreated plots. Nitrapyrin was applied together with slurry, which was analyzed for N-Org and N-NH₄⁺. At V5 stage of corn 330 soil samples were analyzed to determine N-NH₄⁺ (mg/ Kg DW), N- NO₃ - (mg/kg DW), and other parameters using wet chemistry and NIR technology.

Field trials (32) were conducted in Italy and Germany in 2012-2018. Trials were 4-times replicated with plot size 100- 3000 sqm. Chlorophyll was measured using Yara N-Tester. Crop vigor was assessed visually in scale 0-100%.



Silage yield in t/ha, data from 2015-2016, (N=13), Italy

Nitrapyrin added to the slurry demonstrated clearly:

- increased nitrogen retention in the soil
- more chlorophyll content
- improved crop vigor
- increase of the silage yield

Nitrification inhibitors should become an obligatory addition to the slurry to improve Nitrogen Use Efficiency and increase the value of slurry as a fertilizer.