

Sample abstract analysis N4 (correct data classification): Rating N (Cook), NR: re:look climate;

Author(s)	Reference	Cook category (abstract + title based) E – N – R/U	re:look main category (data based) NR - R	re:look sub category (data based), if R RS – RN - RR	re:look reassessment (this paper)	Details of assessment Comments / Open items
Engstroem and Linden	Acta Agriculturae, 2009; 59: 402413	N	NR		N4	Agriculture paper

Title: Importance of soil mineral N in early spring and subsequent net N mineralisation for winter wheat following winter oilseed rape and peas in a milder climate.

Abstract:

Nine biennial field experiments, 2000-2004, in south Sweden, 55-56°N, with winter wheat following winter oilseed rape, peas, and oats, were used to estimate the impact of a future milder climate on winter wheat production in central Sweden, 58°N. The trials included studies 1) on losses during winter of soil mineral nitrogen (N_{min}, 0-90 cm soil), accumulated after the preceding crops in late autumn, 2) on soil N mineralisation (N_{net}) during the growing season of the wheat (early spring to ripeness) and 3) on grain yield and optimum N fertilisation (Opt-N rate) of the wheat. Average N_{min} in late autumn following winter oilseed rape, peas, and oats was 68, 64, and 45 kg ha⁻¹, respectively, but decreased until early spring. Increased future losses of N_{min} during the winter in central Sweden due to no or very short periods with soil frost should enhance the demand for fertiliser N and reduce the better residual N effect of winter oilseed rape and peas, compared with oats. Their better N effect will then mainly depend on larger N_{net} (from March to maturity during the winter wheat year). Owing to more plant-available soil N (mainly as N_{net}) Opt-N rates were lower after oilseed rape and peas than after oats despite increased wheat yields (700 kg ha⁻¹) at optimum N fertilisation. In addition to these break crop effects, a milder climate should increase winter wheat yields in central Sweden by 2000-3000 kg ha⁻¹ and require about 30-45 kg ha⁻¹ more fertiliser N at optimum N fertilisation than the present yield levels. Increased losses and higher N fertilisation to the subsequent winter wheat in future indicates a need for an estimation of the residual N effect at the individual sites, rather than using mean values as at present, to increase N efficiency.

Justification of Classification:

Cook: N: The abstract states nothing on AGW, neither explicit nor implicit

re:look climate: NR (relevant) Although the work mentions climate change in the introduction, it clearly deals with topics which are not contributing to the science of climate change.

Overall re:look conclusion: This examples underlines a further weakness of the Cook et al. approach: A large number of papers should actually be excluded from the search as the work and data is not related to climate change. At least the N4 classification is correct, and thus does not distort the Cook et al. message.