N-Expert 4

Fertiliser recommendations and nutrient balances for field vegetables

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Leibniz-Institute for Vegetable and Ornamental Crops

N-Expert Software News - 2016/11/09

Next planned Update

- Version 4.4. in spring 2017
  (N-Expert according to the German fertiliser regulations
  (Düngeverordnung))

Known issues of the current Version 4.3.1

- On some computers, an update is downloaded but not installed on the
  first attempt.
  Workaround: Close and reopen the program. Then the update is
  downloaded again and then installed correctly.
- On some computers running **Windows 10**, the Reports / Documentation
  tab and the Fertilizer / N fertilizer tab are not displayed completely after
  the program is opened.
  Workaround: The size of the window in which the program is running
  must be changed once after the program start; e.g. drag a window
  corner with the mouse, or switch the window to full screen.
  The error occurs again after each program start.

Version history
Version 4.3.1 - 2016/10/01

- Version 4.3.1. uses a new database system (SQLite). The new database is significantly
  faster and easier to maintain than the previous. The Access database used in
  previous N-Expert versions can no longer be used. We are sorry that we cannot offer
  an automatic transfer of data from the old database to the new database.
- The N mineralization of humus no longer needs to be estimated by the user for each
  month of the year. It is now sufficient to provide only one estimate
  of the mineralization rate at 20° C soil temperature at 10 cm depth. The
  program then estimates the time course of N mineralization using the soil
  temperatures of the selected weather station.

- In a new tab "Reports / N flows" a graphic is displayed. The graph shows the estimated time courses of N uptake, N from humus, N from crop residues, N from organic fertilizers, etc.
- The user information about loading and installing updates has been improved.
- An error in the calculation of N fertilization recommendations has been fixed.

Version 4.3.0 - 2016/04/01

- The time course of N mineralization from organic fertilizers is now estimated and taken into account when calculating fertilizer recommendations.
The database of commercial organic fertilizers and farm manures was extended. Estimated N mineralization is affected by type of organic matter, N content and CN ratio.
Soil temperature is also considered. Long term averages of soil temperature are provided for 500 locations in Germany. The user can use these long term temperature averages or manually enter current measurements.

Version 4.2.2 - 2015/10/01

- Data base updates are provided on the IGZ server and downloaded automatically by the program.
- Small improvements of the user interface

Version 4.2.1 - 2015/07/01

- Amended Help textes
- Small corrections

Version 4.2.0 - 2015/05/01

- Update from N-Expert Version 3 - program and database were completely revised.