



## **Validation of phenological models with data from an agrophenological station.**

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An agrophenological station has been established in 2003 by DiSTA and ARPA-SIM, in Cadriano (Bologna, Italy, 44° 35' N, 11° 27' E, 33 m a.s.l.) next to the agrometeorological station of the Bologna university.

Eleven field crops common in Emilia-Romagna region are grown at the station. The phenological observations are being carried out following the BBCH scale. Data are collected in a database and published weekly on the Regional agrometeorological extension bulletin.

During the 90's ARPA-SIM made operational some phenological models for main field crops. The models were then calibrated with ten years (1987-1996) of agrophenological data from a regional network not existing anymore.

The phenological data collected in the agrophenological station allowed us to estimate the level of accuracy of the phenological crop model outputs which turned out to be satisfactory for operational purposes. Results from the validation exercise are presented in this work.