

# Additional Reading



## *The Application of Multiple Linear Regression and Artificial Neural Network Models for Yield Prediction of Very Early Potato Cultivars before Harvest*

Magdalena Piekutowska et. al. (2021)

Link:

<https://www.mdpi.com/2073-4395/11/5/885>

Quantitative Yield Forecast		
Models RY1 and NY1	Yield Forecast before Harvest (40 Days from Full Emergence)	Data Range
INSO	insolation sum [h] in the periods: planting—June 20,	275.3–711.7
TEMP	average daily air temperature [°C] in the periods: planting—20 June	10.8–15.7
PREC	precipitation [mm] in the periods: planting—20 June	38.7–258.2
NITRO	sum of nitrogen fertilization [kg·ha <sup>-1</sup> ] in the periods: planting—20 June	80–155
PHOSP	sum of phosphorus fertilization [kg·ha <sup>-1</sup> ]	28.2–150
POTAS	sum of potassium fertilization [kg·ha <sup>-1</sup> ]	80–306.5
PLANT	planting date [number of days since the beginning of the year]	107–127
EMERG	date of emergence [number of days since the beginning of the year], yield forecast 20th of June	130–151
DENST	densification [plants/plot], yield forecast June 20	35–60
PH	Soil pH [in 1 mol KCl]	5.8–7
SFERTP	soil fertility in phosphorus [mg P <sub>2</sub> O <sub>5</sub> ·100 g <sup>-1</sup> soil]	14–26.2
SFERTK	soil fertility in potassium [mg K <sub>2</sub> O·100 g <sup>-1</sup> soil]	11.7–19.2
SFERTM	soil fertility in magnesium [mg Mg·100 g <sup>-1</sup> soil]	3–9.1
YELDP1	tuber yield [t·ha <sup>-1</sup> ], harvest 40 days from full emergence	11.6–41.3