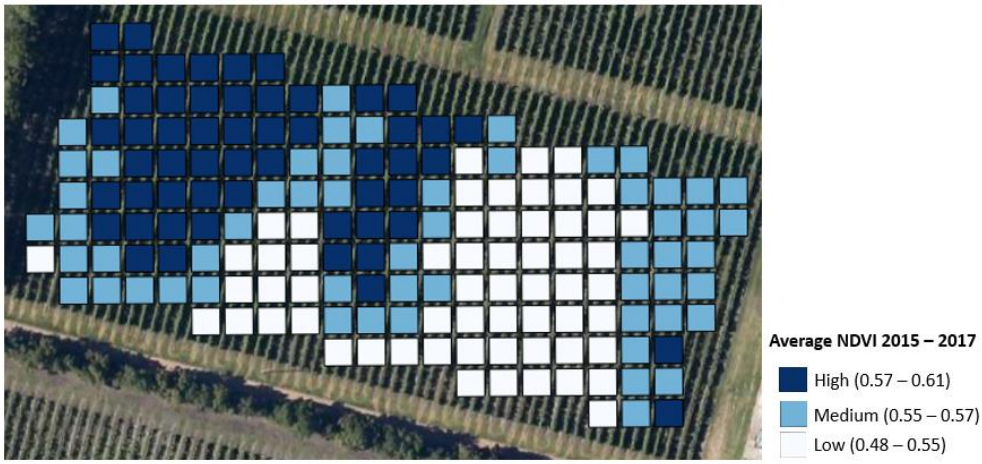
Supplementary data

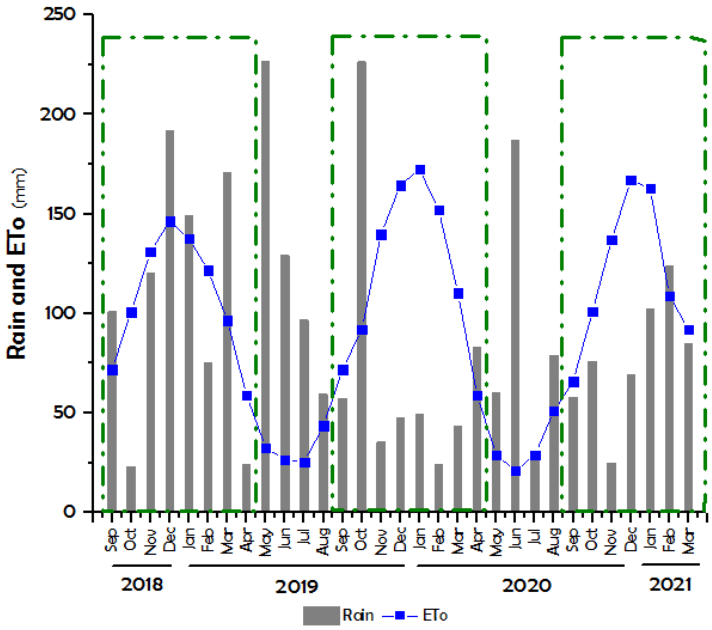


Supplement 1. Map of NDVI values depicting the three vigor zones based on the average NDVI over the period from 2015 to 2017.

Supplement 2. Harvest date for each year and treatment.

VIGOR	TREATMENT / SEASONS	2019	2020	2021
HIGH VIGOR	Control (HV)	6th of March	10th of March	05th of March
	Water restriction (H-W)	04th of March	04th of March	N.T.
	Nitrogen restriction (H-N)	01st of March	05th of March	N.T.
	Leaf removal (H-L)	04th of March	10th of March	05th of March
LOW VIGOR	Control (LV)	6th of March	05th of March	05th of March
	Irrigation (L+W)	N.T.	10th of March	05th of March
	Nitrogen supply (L+N)	6th of March	04th of March	05th of March
	Irrigation+Nitrogen supply (L+WN)	N.T.	N.T.	05th of March

N.T.: No treatment



Supplement 3: Monthly weather data records for three cropping seasons.
Rainfall (mm) and Reference evapotranspiration ETo (mm). The green rectangles represent the cropping cycles (Sep - Mar).