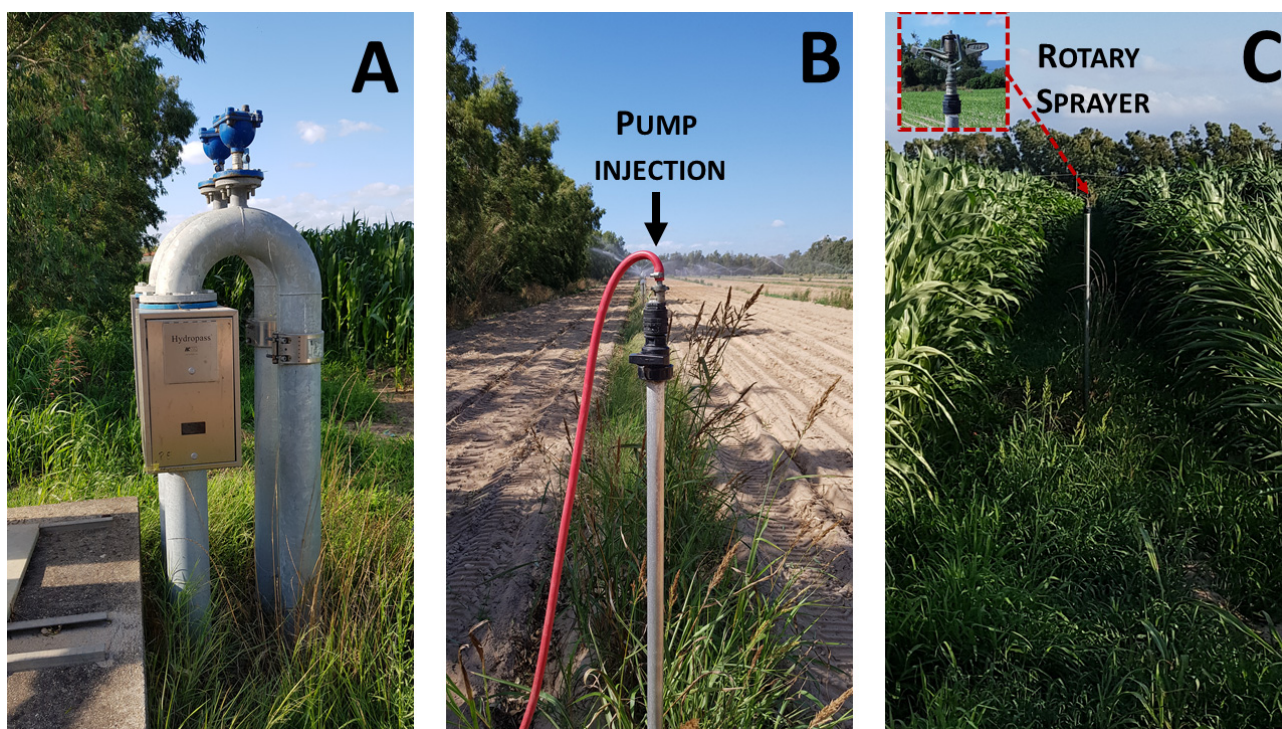


Figure S1. Weather data in the experimental site during the study period.

Date	Moisture Total (mm)	Min Temp (°C)	Max Temp (°C)	Avg Temp (°C)	% Relative Humidity	Min Wind (kph)	Max Wind (kph)	Avg Wind (kph)	% Cloud Cover	Avg Shortwave Radiation (W/m2)
Jun-3-2019	0	13	27	20	68	1	11	5	18	335
Jun-4-2019	0	14	30	22	61	1	13	6	17	334
Jun-5-2019	0	17	31	23	61	7	24	14	21	336
Jun-6-2019	0	17	25	22	80	2	22	10	14	316
Jun-7-2019	0	20	32	24	70	4	22	13	41	322
Jun-8-2019	0,2	19	29	23	80	1	12	6	33	308
Jun-9-2019	0,2	23	33	28	48	6	35	19	38	329
Jun-10-2019	0,2	19	26	22	88	4	21	12	42	321
Jun-11-2019	0	18	26	21	83	3	21	8	42	327
Jun-12-2019	0	18	25	21	79	5	28	17	23	334
Jun-13-2019	0	15	33	24	60	1	29	14	36	335
Jun-14-2019	0,2	19	34	25	64	9	40	23	36	309
Jun-15-2019	0	18	28	23	84	1	20	8	46	322
Jun-16-2019	0	18	27	22	84	3	26	13	38	329
Jun-17-2019	0	16	27	21	82	3	19	10	25	337
Jun-18-2019	0	16	29	22	74	1	19	7	27	340
Jun-19-2019	0	17	31	24	58	1	17	7	35	339
Jun-20-2019	0	16	32	24	55	1	13	7	24	330
Jun-21-2019	0,2	20	30	25	70	2	16	9	36	325
Jun-22-2019	0,1	21	28	24	87	1	25	13	54	323
Jun-23-2019	0	19	30	25	64	1	13	6	32	329
Jun-24-2019	0	19	35	27	60	4	17	10	18	337
Jun-25-2019	0	21	37	28	52	1	19	9	14	338
Jun-26-2019	0	20	35	28	62	1	17	7	13	335
Jun-27-2019	0	21	33	27	61	1	22	7	25	332
Jun-28-2019	0	20	33	26	68	2	25	12	30	335
Jun-29-2019	0	20	33	27	70	1	15	6	31	332
Jun-30-2019	0	22	33	28	69	1	19	8	19	332
Jul-1-2019	0	21	34	27	72	4	16	9	19	333
Jul-2-2019	0	20	33	27	72	2	19	7	18	335
Jul-3-2019	0	21	33	27	76	2	18	8	21	332
Jul-4-2019	0	21	34	29	66	0	13	7	25	334
Jul-5-2019	0	21	36	28	66	0	16	7	20	335
Jul-6-2019	0	20	34	26	76	1	13	7	36	330
Jul-7-2019	0	22	32	27	75	3	21	10	25	321
Jul-8-2019	0	23	38	30	69	4	15	8	21	308
Jul-9-2019	1	24	37	29	67	7	21	14	34	280
Jul-10-2019	0	23	29	26	76	9	29	18	59	223
Jul-11-2019	0	19	30	25	74	1	21	10	26	331
Jul-12-2019	0	21	29	25	79	3	19	11	21	327
Jul-13-2019	0	22	29	26	71	1	27	13	27	324
Jul-14-2019	0,3	19	30	25	75	2	19	9	28	305
Jul-15-2019	1,3	22	28	25	74	2	36	20	55	276
Jul-16-2019	1,7	21	27	24	74	8	34	20	37	306
Jul-17-2019	0	17	30	24	72	4	28	14	18	329
Jul-18-2019	0	18	30	24	84	2	25	12	27	319
Jul-19-2019	0	19	30	25	79	2	19	10	19	324
Jul-20-2019	0	19	35	27	62	4	15	8	28	323
Jul-21-2019	0	20	34	27	65	2	14	8	18	322
Jul-22-2019	0	20	33	27	69	2	14	6	19	320
Jul-23-2019	0	21	33	27	70	1	14	6	19	318
Jul-24-2019	0	22	34	28	63	1	15	7	19	314
Jul-25-2019	0	22	36	29	59	2	17	7	16	316
Jul-26-2019	0	23	37	29	59	1	15	10	21	319
Jul-27-2019	0,5	23	29	26	89	3	32	17	64	228
Jul-28-2019	2,3	23	27	25	68	20	40	32	39	162
Jul-29-2019	0	24	27	26	67	3	29	17	56	236
Jul-30-2019	0	20	31	25	83	3	35	13	19	316
Jul-31-2019	0	20	33	27	76	2	21	10	40	310
Aug-1-2019	0	22	38	30	58	4	21	11	20	306
Aug-2-2019	0,3	24	35	28	70	6	18	11	40	295
Aug-3-2019	0	22	31	26	77	4	19	12	43	312
Aug-4-2019	0	19	33	26	74	3	19	9	24	309
Aug-5-2019	0	21	35	28	64	1	19	7	20	308

Aug-6-2019	0	21	37	29	57	7	19	14	29	304
Aug-7-2019	0	23	34	28	82	2	22	8	32	300
Aug-8-2019	0	24	31	27	93	5	25	13	35	279
Aug-9-2019	0	22	35	28	70	2	18	7	22	299
Aug-10-2019	0	21	33	27	72	2	13	6	30	302
Aug-11-2019	0	23	35	29	60	2	14	7	28	297
Aug-12-2019	0	22	36	29	72	1	20	10	32	284
Aug-13-2019	0,3	23	30	27	74	5	40	22	23	261
Aug-14-2019	0	22	27	25	60	11	33	20	39	278
Aug-15-2019	0	19	29	25	67	9	30	16	16	296
Aug-16-2019	0	21	29	25	70	4	26	15	26	295
Aug-17-2019	0	16	31	24	71	2	19	9	28	294
Aug-18-2019	0	19	34	27	69	2	16	8	22	290
Aug-19-2019	0	20	35	27	69	1	16	8	20	286
Aug-20-2019	0	19	34	27	70	4	15	9	16	286
Aug-21-2019	0	20	33	26	76	2	16	8	19	282

**Figure S2: Bioinsecticidal application system exploiting the existing irrigation equipment.**



- A) Centralized control system at the head of the field receiving water from the network of the local agricultural consortium and regulating water supply to the crop through pipelines running lengthwise across the field.
- B) Injection pump connection at the head of the plot, pushing the water volume with the bioinsecticidal product along the irrigation line.
- C) Rotary sprayer at the upper end of a vertical metal tube of the irrigation system distributing the diluted bioinsecticidal products over a crop area with a radius of 10 metres.