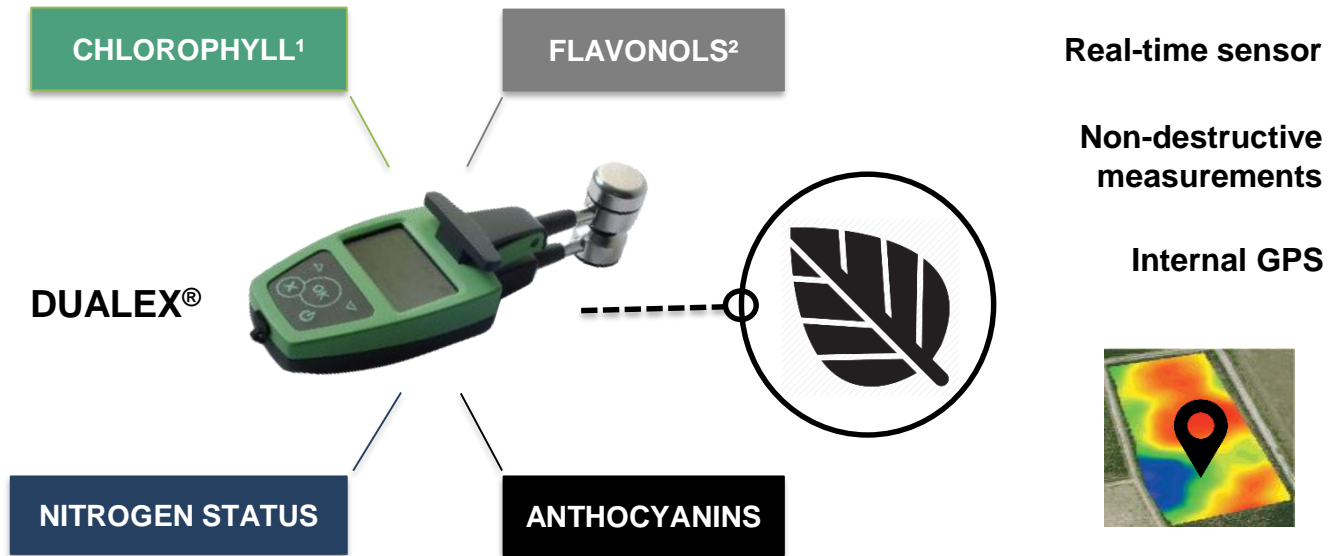


LEAFCLIP FOR THE MEASUREMENT OF PLANT ABIOTIC STRESS



Measurements in the greenhouse or in the laboratory



Measurements in the field or in the biotope



- Chlorophyll content
- Epidermal flavonol content
- Crop nitrogen status (NBI)
- Anthocyanin index (optional)

- Geolocated measurements
- Chlorosis detection
- Water stress indicator
- UV-Visible light indicator

¹ Chlorophyll content in $\mu\text{g}/\text{cm}^2$

² Epidermal flavonol content in absorbance units



TECHNICAL SPECIFICATIONS

Sample measured	Leaf
Parameters measured (measurement method)	Chl : chlorophyll content in $\mu\text{g}/\text{cm}^2$ (transmittance) Flav : epidermal flavonol content in absorbance units (screening effect on fluorescence) NBI : nitrogen status [Optional] Anth : anthocyanin index (screening effect on fluorescence)
Positioning Relative accuracy	Internal GPS < 2,5 m (CEP, 50%, 24 h static)
Area measured Leaf thickness Measurement time Storage capacity Data sorting Error	5 mm diameter 1 mm maximum < 500 ms 10,000 multiparametric data 3 levels (measurement, group, file) $\pm 5\%$
Operating temperature	From 5 to 45 °C
Light sources Detectors	5 LED : 1 UV-A, 1 green, 1 red, 2 near infrared 1 silicon photodiode
Data transfer	USB cable
Battery Autonomy Charge time	Li-ion rechargeable 10 hours 4 hours
Total weight	220 g
Languages	English, French and Spanish



EXAMPLE OF OUTPUT FILE

#jj/mm/aaaa	hh:mm:ss	longitude	latitude	...	Group	Reading	Face	Chl	Flav	Anth	NBI	...
29/05/2016	08:05:54	11.38731683	43.01449383	...	1	1	1	37,00	1,66	0,10	22,29	...
15/06/2016	10:11:45	11.38734650	43.01447483	...	2	1	1	40,00	0,70	0,35	57,00	...
02/07/2016	09:13:12	11.38735150	43.01447200	...	3	1	2	32,00	0,50	0,20	64,00	...



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