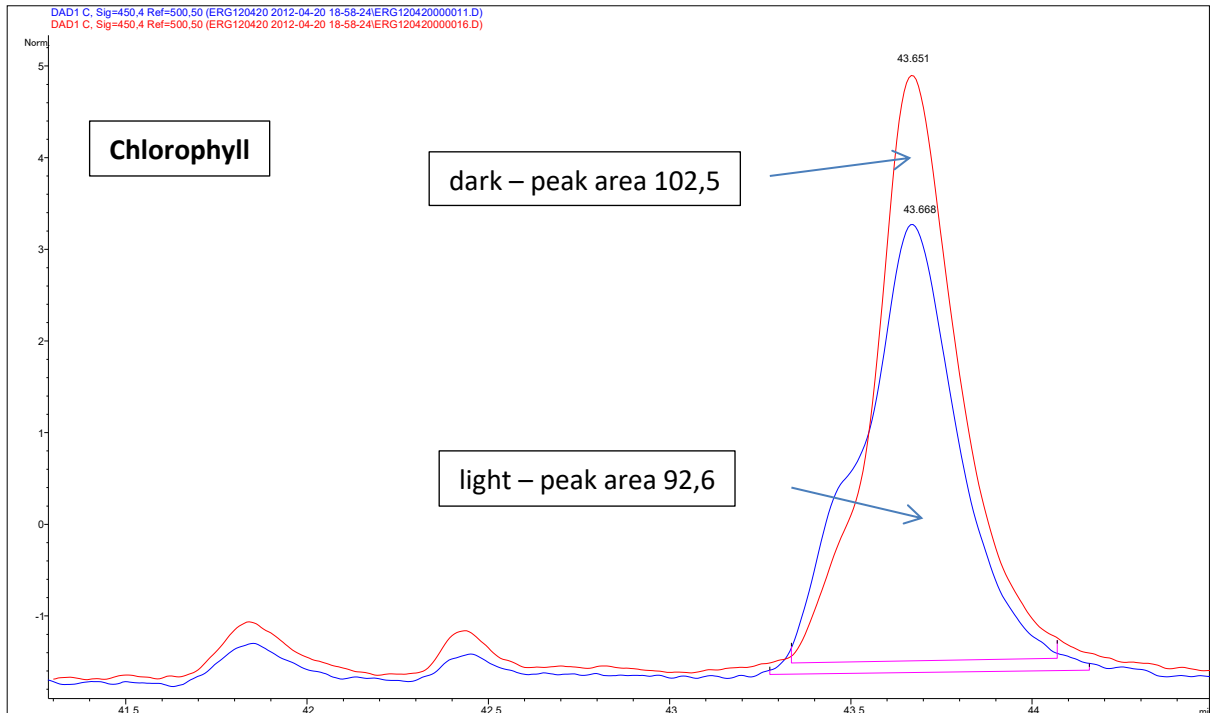


# Influence of light on compounds content in *Tradescantia pallida*

**Anthocyanines** – detector 535nm

**Chlorophyll** – detector 450 nm



cultivation	Anthocyanine - peak areas – fresh material
light	44.7
dark	9.9

cultivation	Chlorophyll - peak areas – fresh material
light	92.6
dark	102.5

**TASK:**

- 1) Calculate the relative concentration of anthocyanines and chlorophyll in dry mass and expressed it graphically.
- 2) Calculate the % of water content

Water content is the basic analytical value of the composition of plant tissues. It is carried out by drying the plant or its parts at a temperature of 105 ° C to constant weight. The basis is to determine the weight loss that corresponds to the water content. The rest is dry matter composed of organic and inorganic substances.

$$\% \text{ of water content} = \left(1 - \frac{\text{weight of dry material}}{\text{weight of fresh material}}\right) \times 100$$

plant	cultivation	weight of fresh material	weight of dry material	% of Water content	anthocyanin	anthocyanin (0.1 g)	chlorophyll	chlorophyll (0.1 g)
Tradescantia pallida	Light	5,857	0,274	95,3	44,7	16,31	92,60	33,80
Tradescantia pallida	Dark	3,729	0,484	87	9,9	2,05	102,5	21,18

**Relative concentration of anthocyanins and chlorophyll in dry mass**

