**Influence of lighton compounds content in *Tradescantia pallida***

**Anthocyanines** – detector 535nm

**Chlorophyll** – detector 450 nm

min

41.5

42

42.5

43

43.5

44

Norm.

-1

0

1

2

3

4

5

DAD1 C, Sig=450,4 Ref=500,50 (ERG120420 2012-04-20 18-58-24\ERG120420000011.D)

43.668

DAD1 C, Sig=450,4 Ref=500,50 (ERG120420 2012-04-20 18-58-24\ERG120420000016.D)

43.651

**Chlorophyll**

dark – peak area 102,5

light – peak area 92,6

|  |  |
| --- | --- |
| **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 anthocyanins 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.

% of water content = (1- weight of dry material ) x 100

weight of fresh material

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 |