

## Obliczanie zawartosci barwników fotosyntetycznych

### Aceton 80% (v/v)

- Chlorofil a

$$C_a = 12.25A_{663.2} - 2.79A_{646.8}$$

- Chlorofil b

$$C_b = 21.50A_{648.8} - 5.10A_{663.2}$$

- Chlorofile a+b

$$C_{a+b} = 7.15A_{663.2} + 18.71A_{646.8}$$

- Karotenoidy

$$C_{x+c} = \frac{1000A_{470} - 1.82C_a - 85.02C_b}{198}$$

### Aceton 100%

- Chlorofil a

$$C_a = 11.24A_{661.6} - 2.04A_{644.8}$$

- Chlorofil b

$$C_b = 20.13A_{644.8} - 4.19A_{661.6}$$

- Chlorofile a+b

$$C_{a+b} = 7.05A_{661.6} + 18.09A_{644.8}$$

- Karotenoidy

$$C_{x+c} = \frac{1000A_{470} - 1.9C_a - 63.14C_b}{214}$$

### Metanol 90% (v/v)

- Chlorofil a

$$C_a = 16.82A_{665.2} - 9.28A_{652.4}$$

- Chlorofil b

$$C_b = 36.92A_{652.4} - 16.54A_{665.2}$$

- Chlorofil a+b

$$C_{a+b} = 0.28A_{665.2} + 27.64A_{652.4}$$

- Karotenoidy

$$C_{x+c} = \frac{1000A_{470} - 1.91C_a - 95.15C_b}{225}$$

### Metanol 100%

- Chlorofil a

$$C_a = 16.72A_{665.2} - 9.16A_{652.4}$$

- Chlorofil b

$$C_b = 34.09A_{652.4} - 15.28A_{665.2}$$

- Chlorofil a+b

$$C_{a+b} = 1.44A_{665.2} - 24.93A_{652.4}$$

- Karotenoidy

$$C_{x+c} = \frac{1000A_{470} - 1.63C_a - 104.96C_b}{221}$$

### Na podstawie:

Lichtenthaler, H. K. (1987). [34] Chlorophylls and carotenoids: pigments of photosynthetic biomembranes. *Methods in enzymology*, 148, 350-382.