



# LEAF AREA INDEX 'LAI' OF WETLAND VEGETATION

## THE MIDDLE VISTULA FLOODPLAIN CASE STUDY

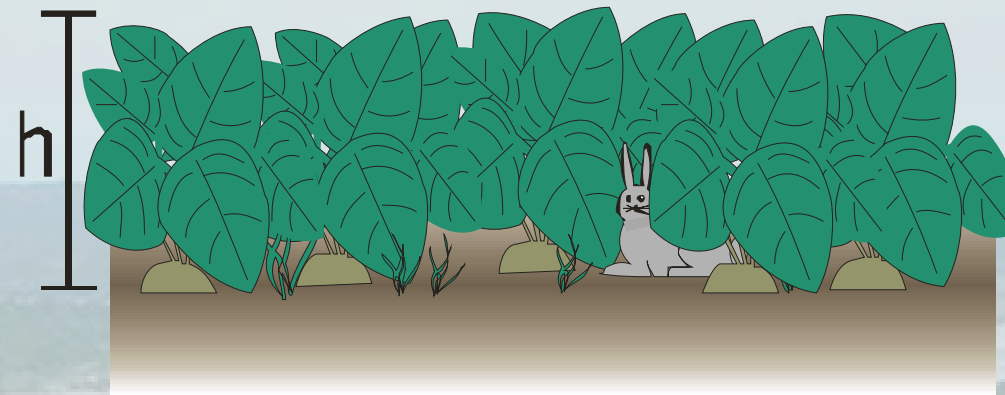
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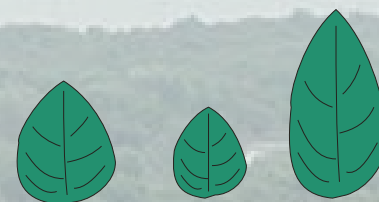
# LAI



## h



# LAD



$$S_1 + S_2 + S_3 + \dots = S \text{ [m}^2\text{]}$$

# m<sup>2</sup>



# m<sup>3</sup>

# LAI [m<sup>2</sup>/m<sup>2</sup>]



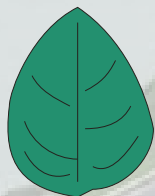


# LAI-2000

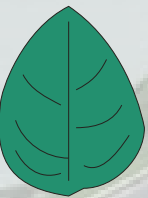




**LAI<sub>s</sub>**







**LAI<sub>w</sub>**



**LAI<sub>w</sub>**





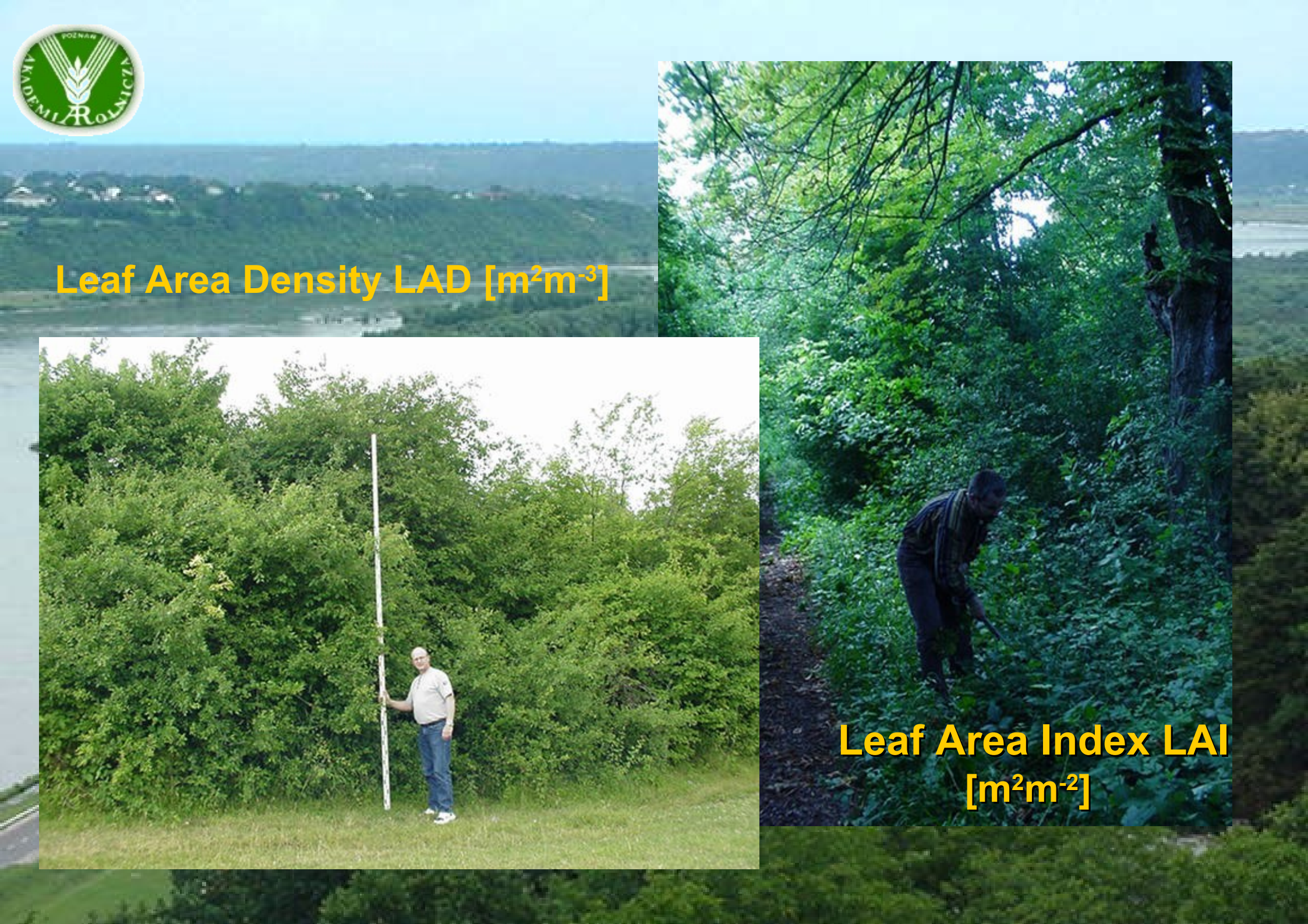
Dęblin

Puławy

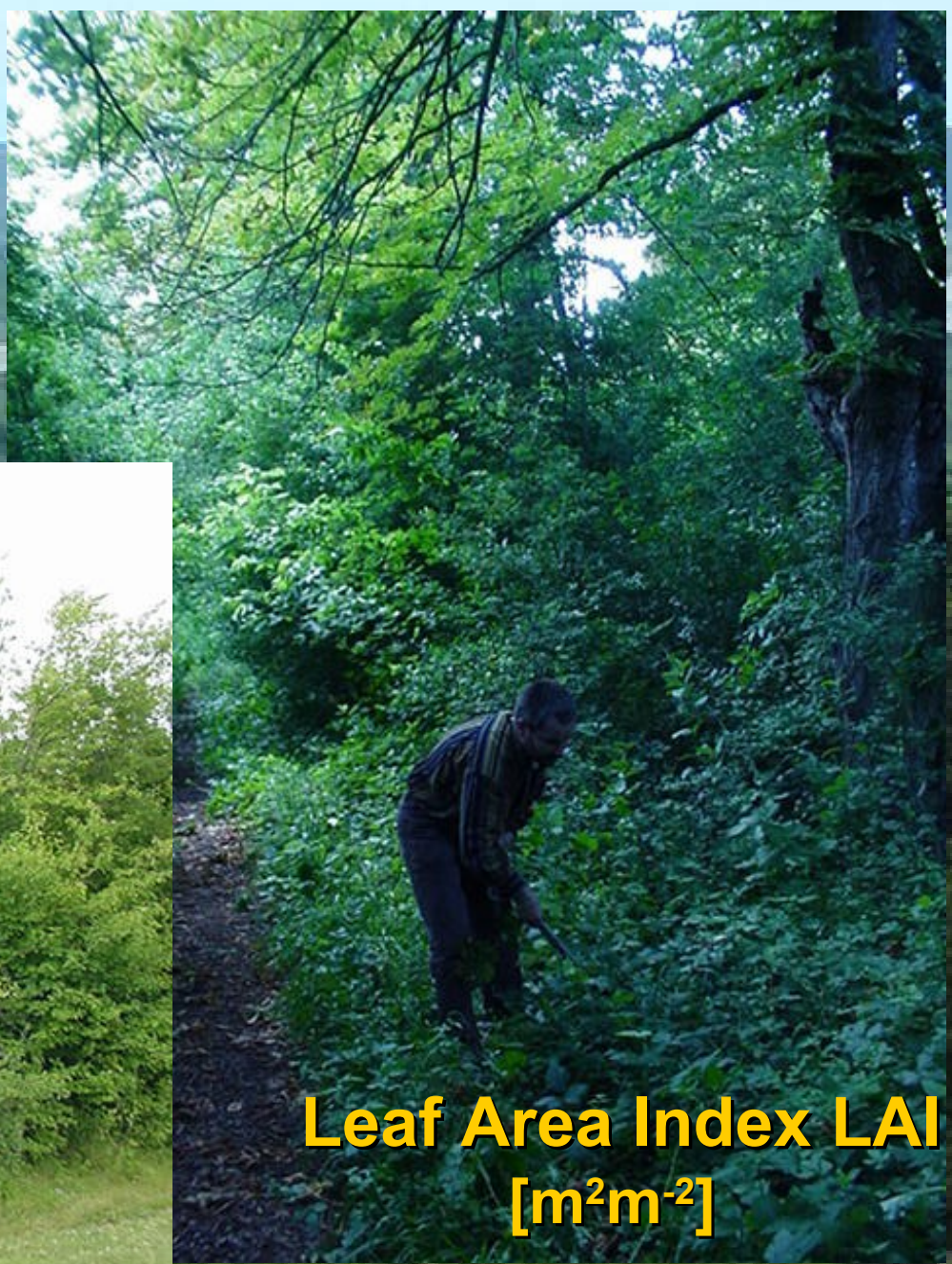
Janowiec

Kazimierz





**Leaf Area Density LAD [ $m^2m^{-3}$ ]**



**Leaf Area Index LAI [ $m^2m^{-2}$ ]**

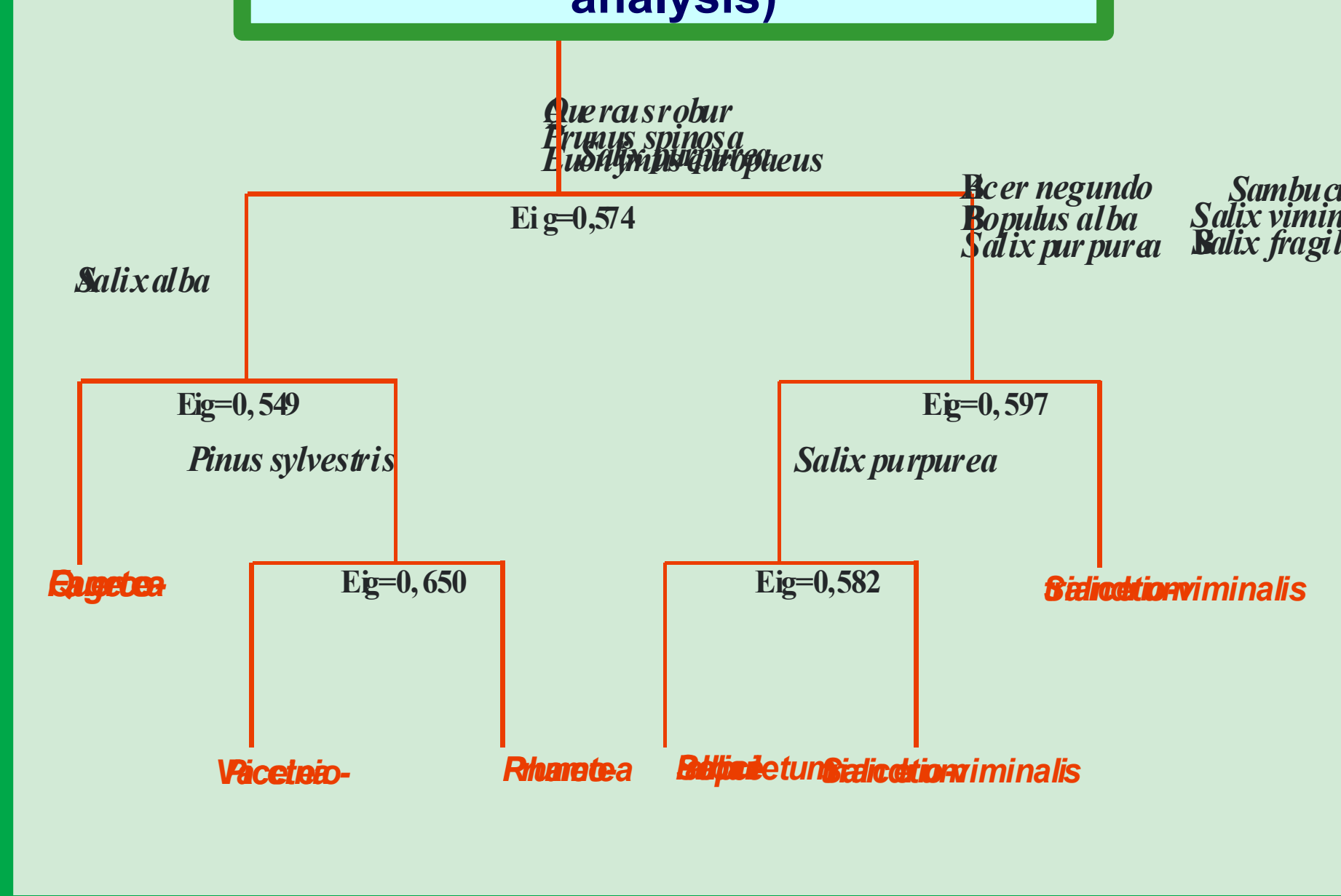








# TWINSPAN (two way indicator species analysis)







## **TWINSPAN groups were classified according to phytosociological system**

**Class: Rhamo-Prunetea** Rivas Goday et Borja Carb. 1961

Order: Prunetalia spinosae Tx 1952

**Class: Querco-Fagetea** Br.-Bl. et Tx. 1943

Order: Fagetalia silvaticae Pawł. 1928

Alliance: Carpinion betuli Issl. 1931

**Class: Vaccinio-Piceetea** Br.-Bl. 1939

Order: Cladonio-Vaccinietalia Kiell.-Lund 1967

Alliance: Dicrano-Pinion Libb. 1933

Order: Vaccinio-Piceetalia Br.-Bl. 1939

Alliance: Vaccinio-Piceenion Oberd. 1957

**Class: Salicetea purpureae** Moor 1958

Order: Salicetalia purpureae Moor 1958

Alliance: Salicion alba Tx. 1955

Association: Salici-Populetum albae Tx. 1993

Association: Salicetum triandrio-viminalis Lohm. 1952



# Results

12.03

22.06

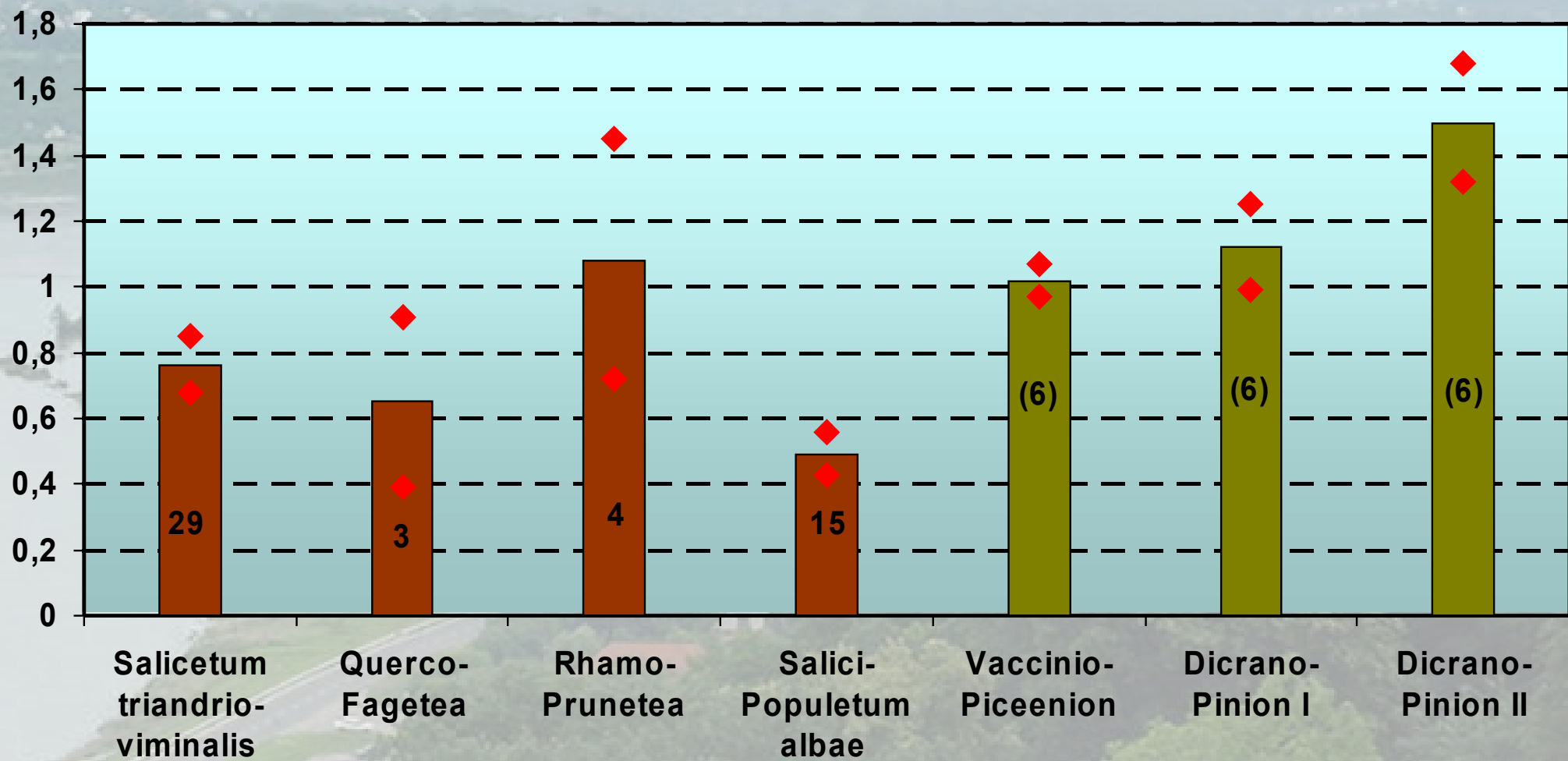
Communities	LAI <sub>w</sub>
<i>Rhamo-Prunetea</i>	1.42 – 0.91
<i>Querco-Fagetea</i>	0.72 – 0.53
<i>Vaccinio-Piceetea</i>	1.50 – 1.02
<i>Salici-Populetum albae</i>	0.68 – 0.22
<i>Salicetum triandrio-viminalis</i>	1.23 – 0.27

LAI <sub>s</sub>
5.63 – 3.91
3.78 – 1.93
3.92 – 2.05
3.78 – 0.92
6.00 – 1.21



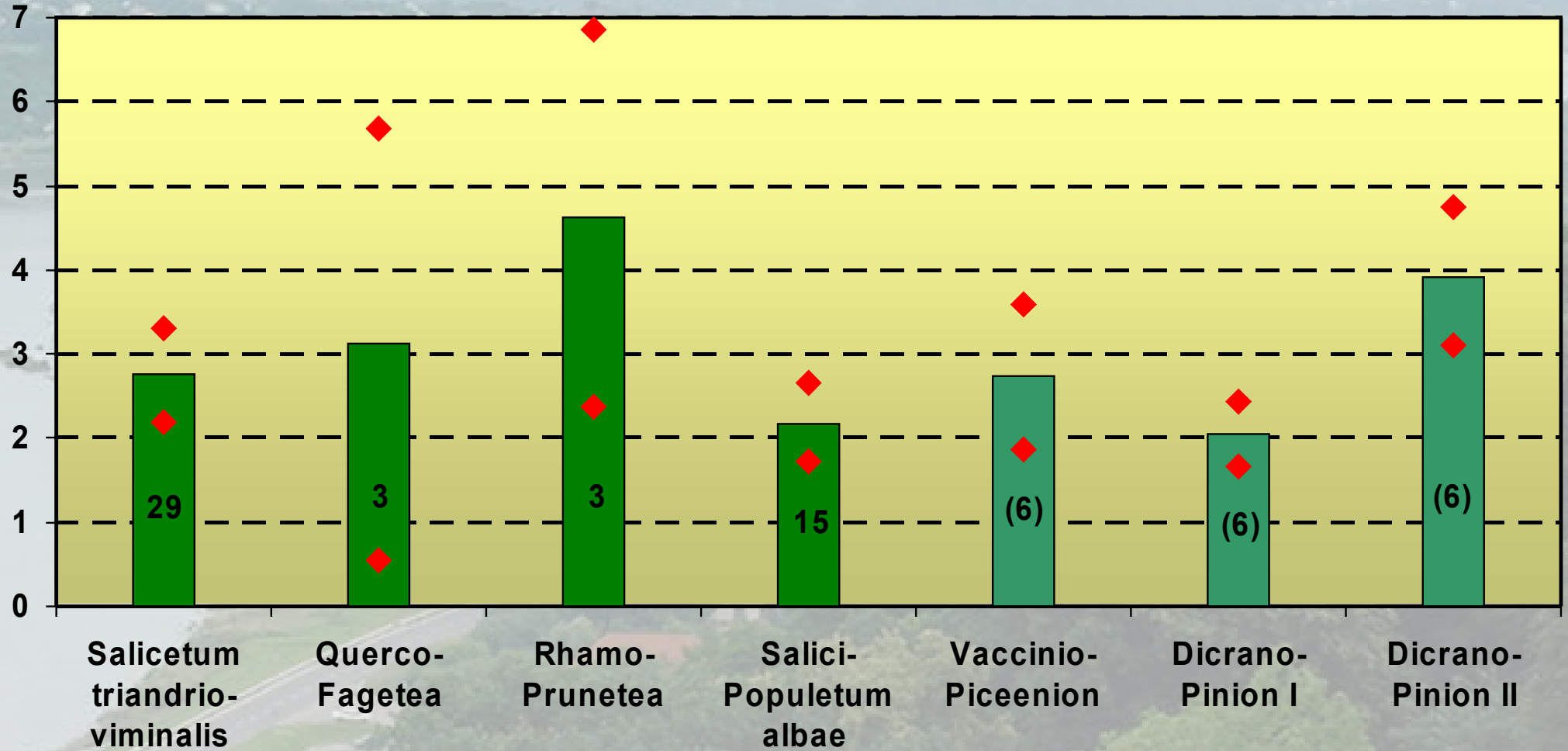


# LAI<sub>w</sub>





# LAI<sub>s</sub>

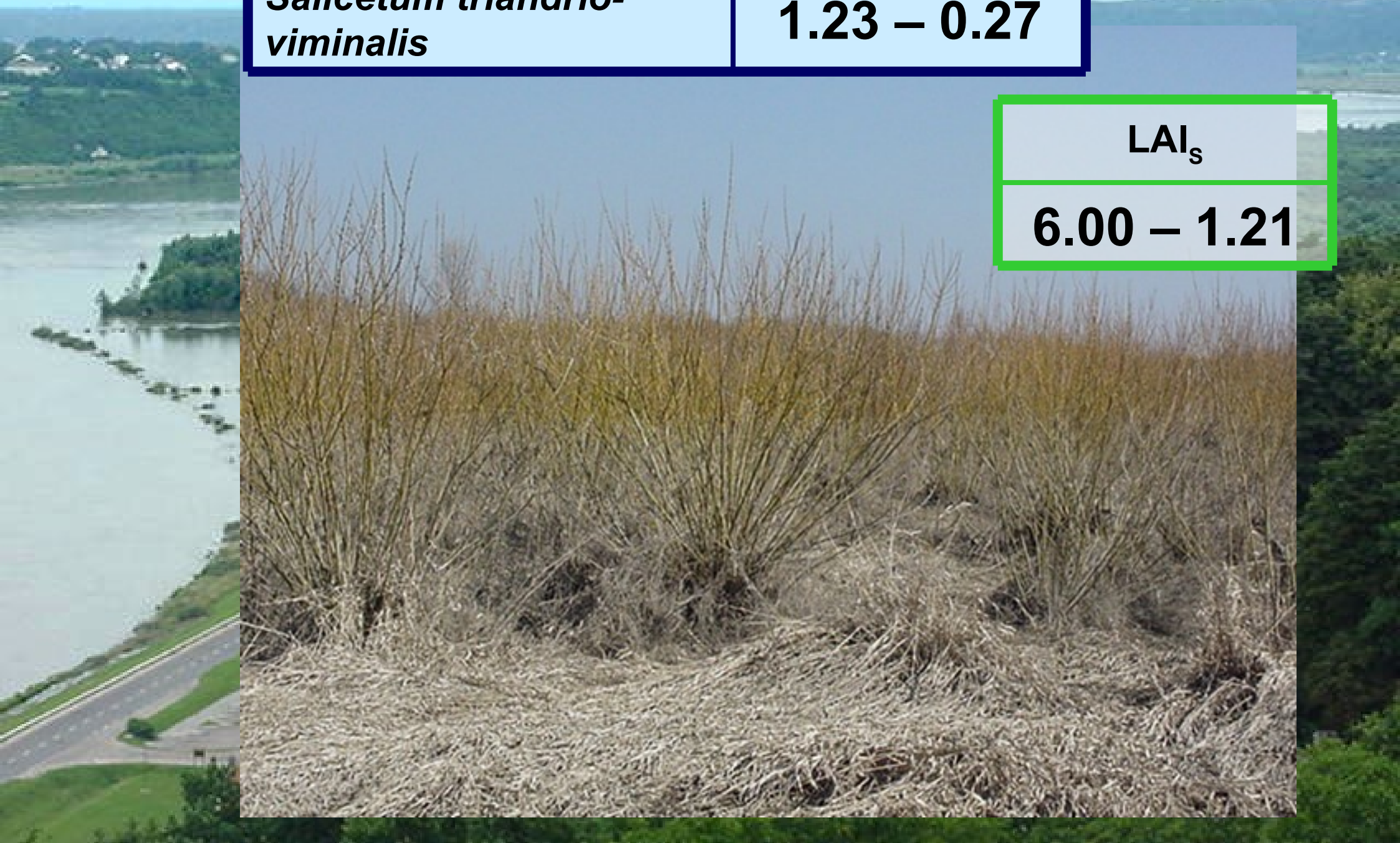




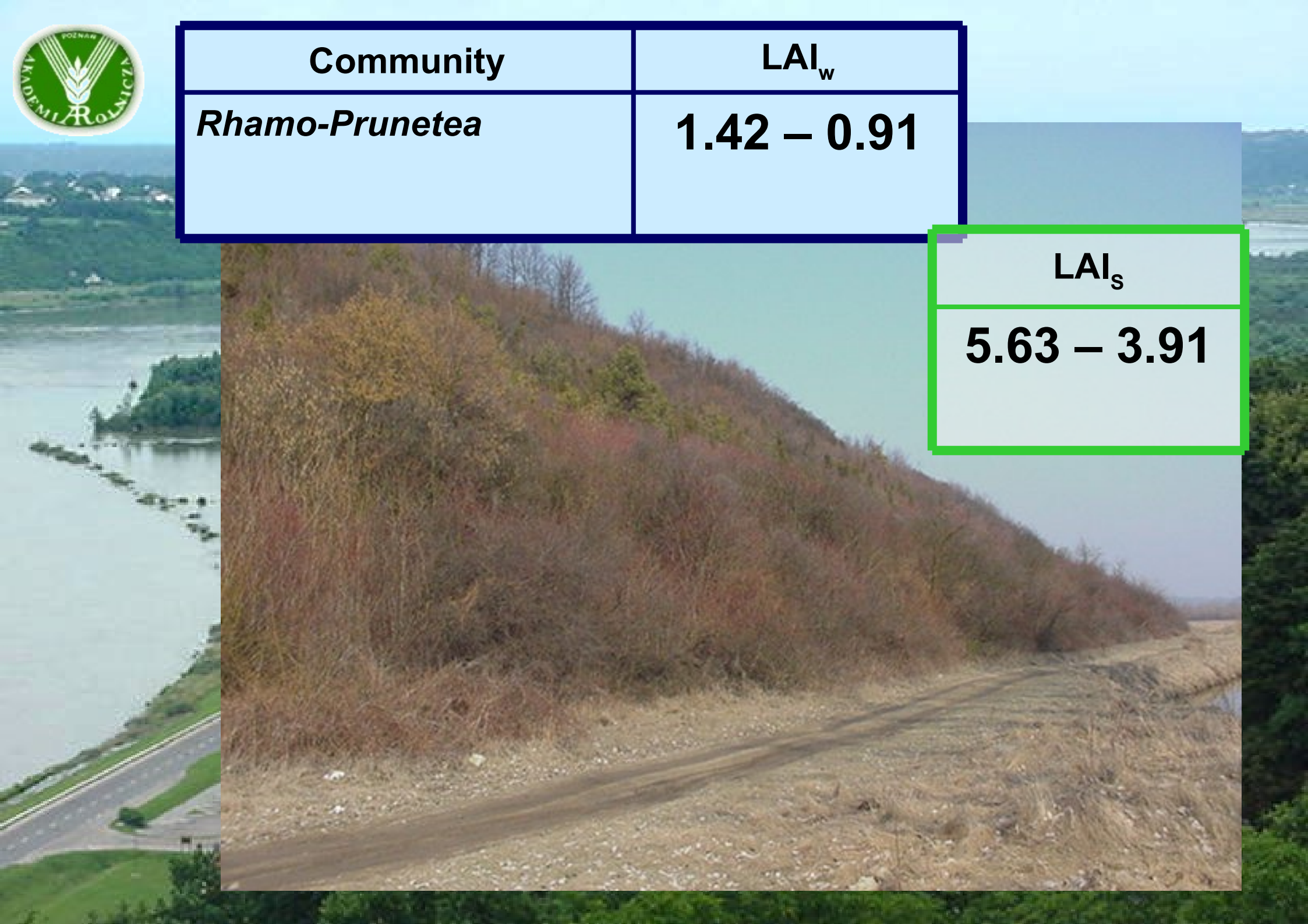


Community	$LAI_w$
<i>Salicetum triandrio-viminalis</i>	1.23 – 0.27

$LAI_s$
6.00 – 1.21







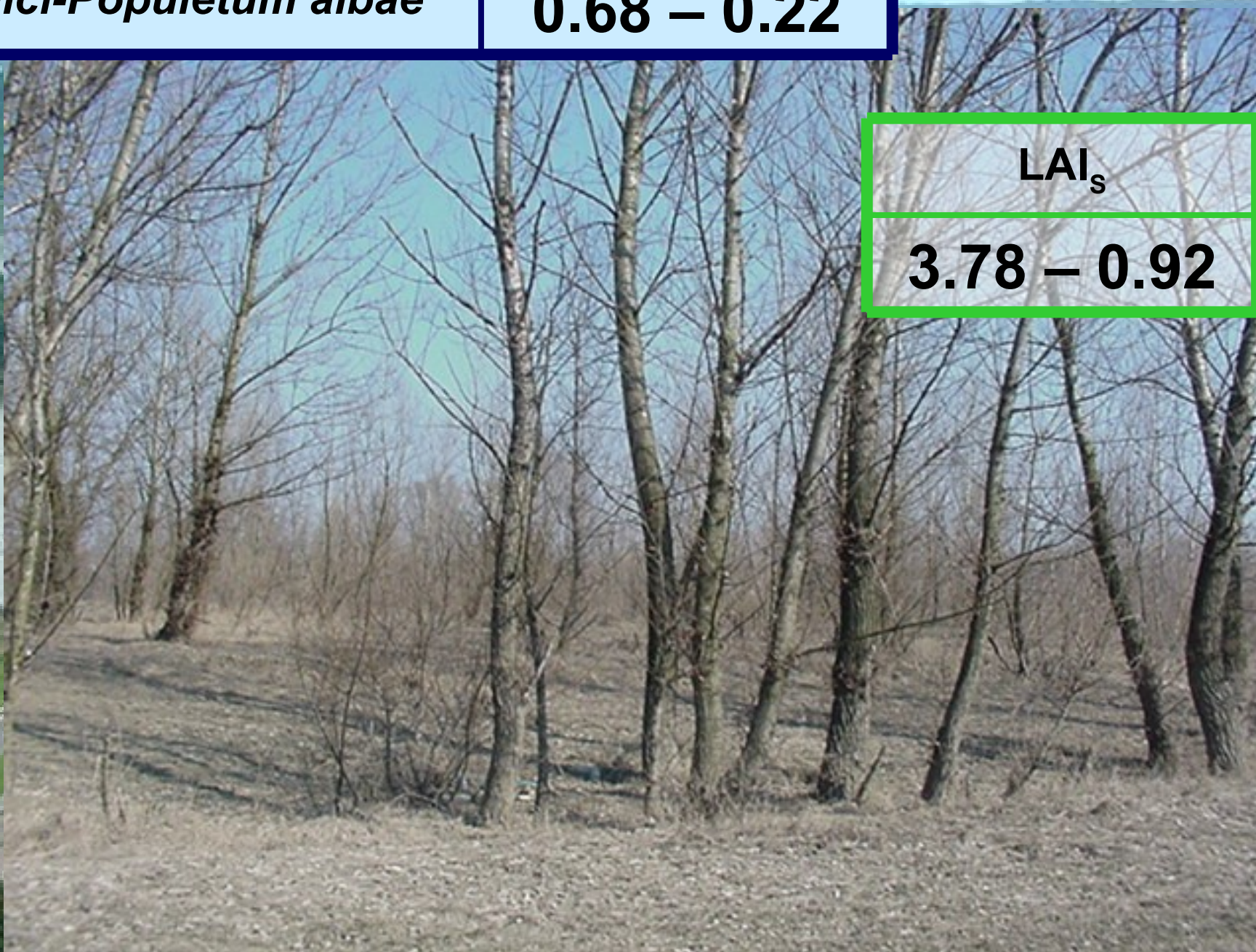
Community	$LAI_w$
<i>Rhamo-Prunetea</i>	<b>1.42 – 0.91</b>

$LAI_s$
<b>5.63 – 3.91</b>





Community	$LAI_w$
<i>Salici-Populetum albae</i>	<b>0.68 – 0.22</b>



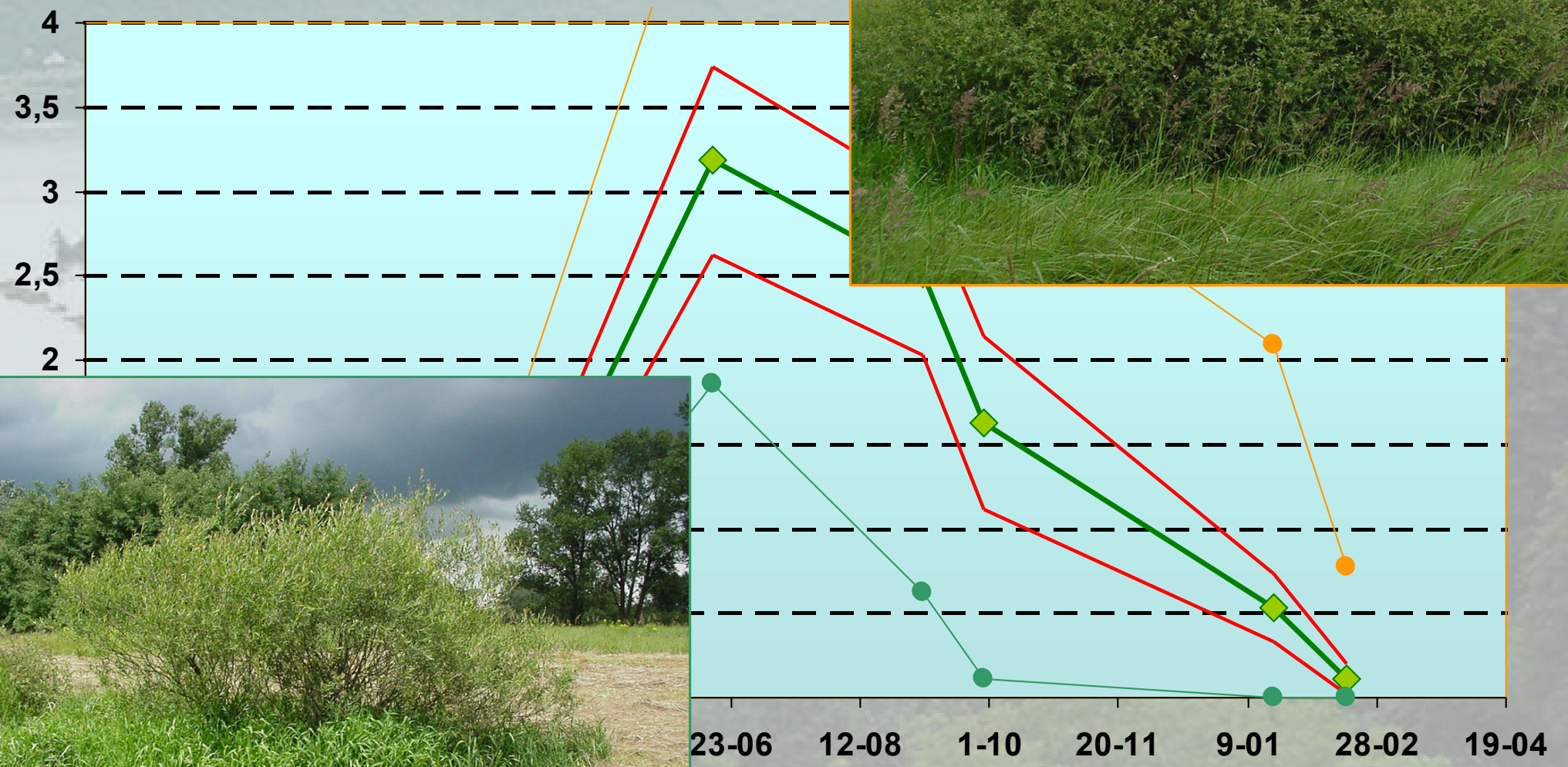
$LAI_s$
<b>3.78 – 0.92</b>





# LA

*Salicetum triandri*  
5,2

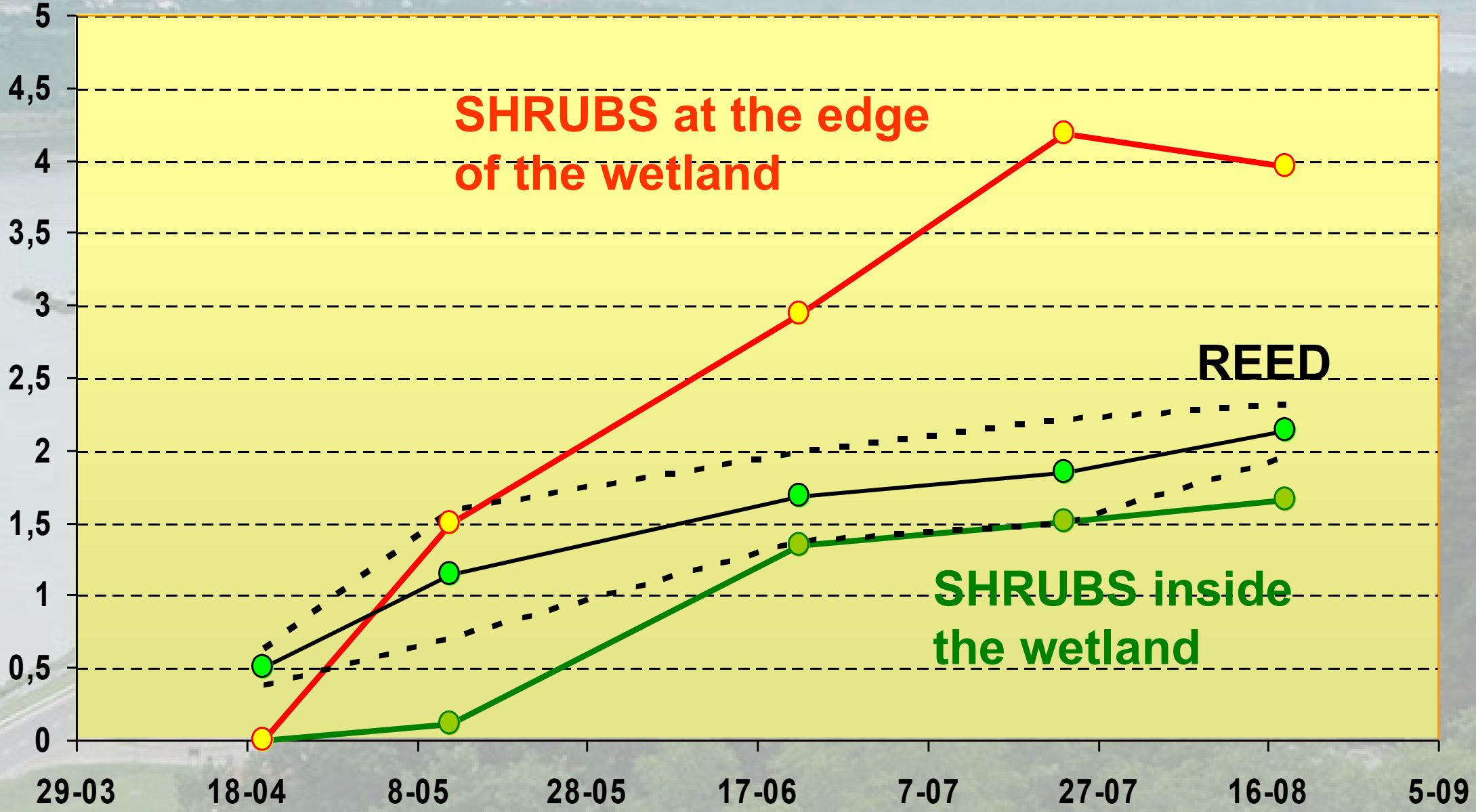






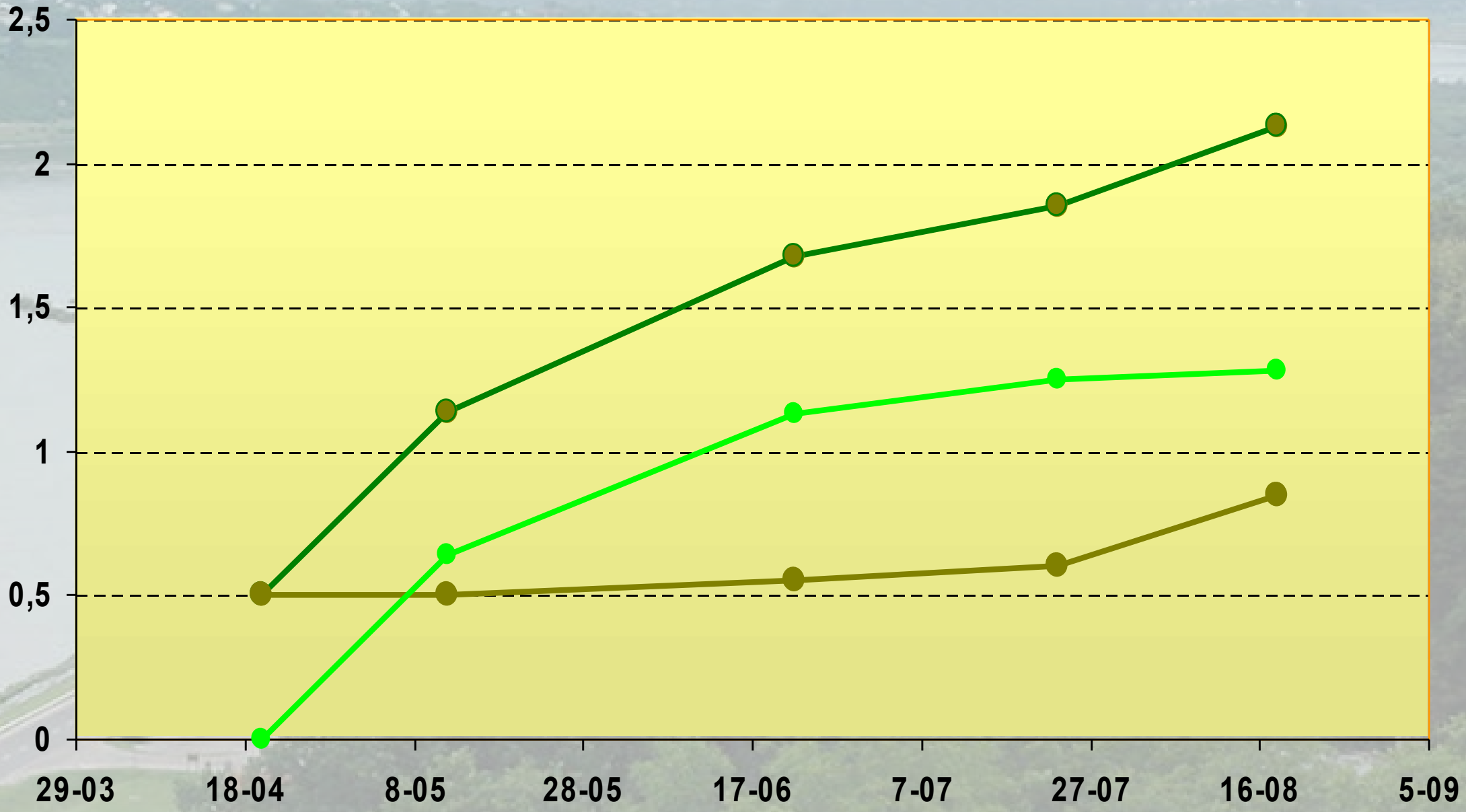
# LAI

## *Salicetum triandrio-viminalis*





# LAI REED







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