

BIOKENAF

QLK5 CT2002 1729

CETA

Centro di Ecologia Teorica ed Applicata

WP 2: Adaptability and Productivity Field Trials



Task 2.4: Kenaf field trials with size of 2 Ha

WP 4: Harvesting & Storage trials,



Task 4.1 and Task 4.2

PRE-SOWING WORKS

Plowing

Chemical fertilisation (60 Kg 8/24 + 60 Kg Urea)

Chemical herbicide

Seedbed preparation - milling

KENAF FIELD BEFORE SEEDING



20th May, 2003

KENAF FIELD SOWING DATES:

First sowing date: 28th May, 2003



1 ha

Second sowing date: 21st June, 2003



0,45 ha

KENAF FIELD DURING SEEDING



28th May, 2003
1st sowing



SOWING PARAMETERS (28-05-2003)

Plant population: 221000 plants/ha

Space between plants: 10x45 cm

Sowing depth: 3-4 cm

Working duration: 30 minutes

Air humidity: 60%

Air temperature: 32,7 ° C

Soil temperature: 21,1°-26,5 ° C (0-10 cm)

Upper-soil temperature: 36,3°-45,2° C

Quantity of seed used: 7 kg (1st sowing), 3 kg (2nd sowing)

Germination trial: 93% seeds germinated in vitro



Only 7 seeds of 100 didn't germinate = High Quality seeds!!



KENAF GERMINATION

4th June, 2003



Eight days after sowing



KENAF DEVELOPMENT

One month after 1st sowing



Medium plant height: 35 cm



8th July 2003



42 days after 1st sowing



Middle plant height:
60 cm – 1st sowing
5 cm – 2nd sowing



7th August 2003

72 days after 1st sowing

Medium height: 130 cm – 1st sowing
60 cm – 2nd sowing



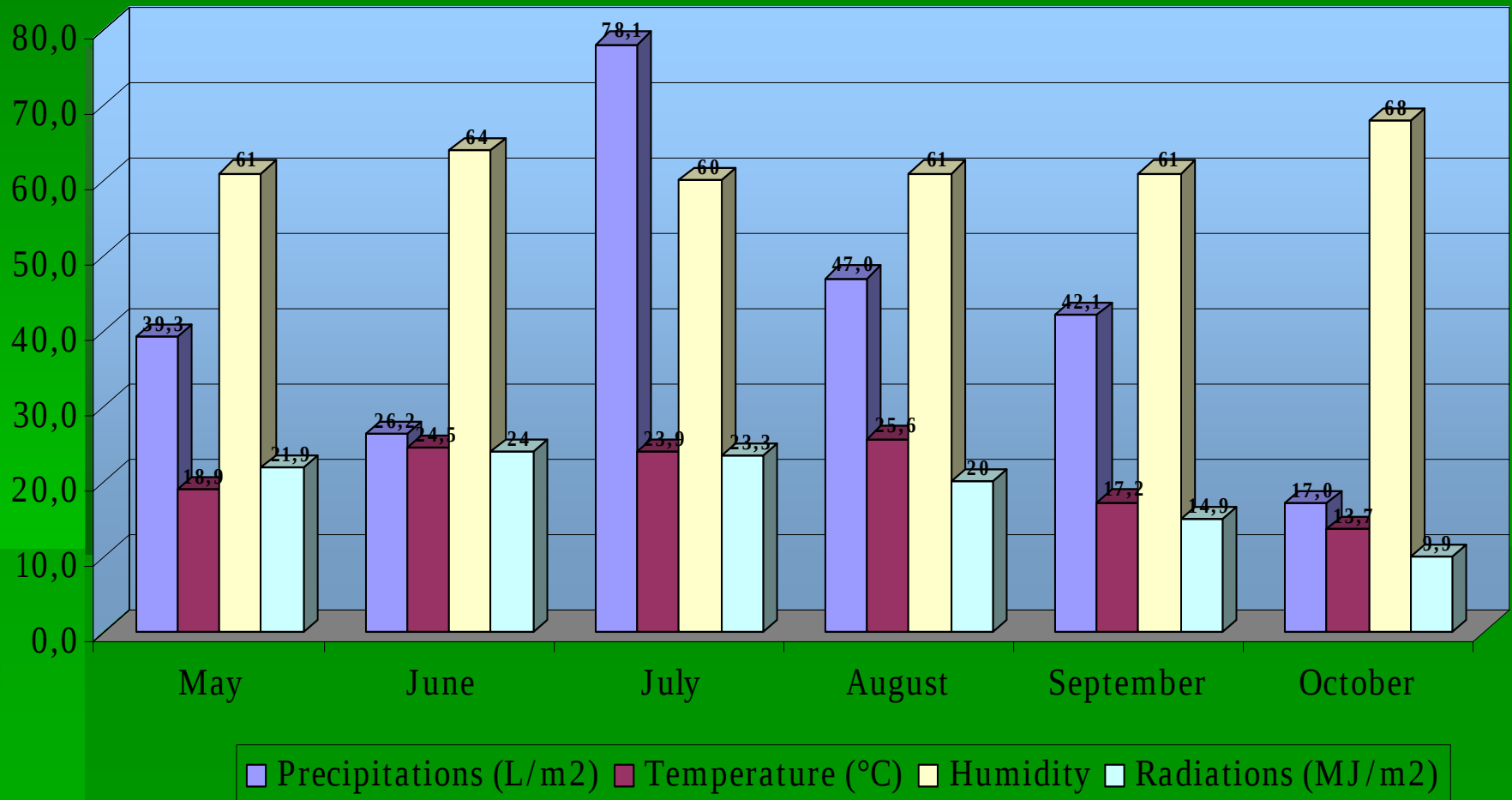
12th September 2003



25th September 2003



CLIMATIC CONDITIONS



Actual Kenaf characteristics

(15/10/2003):

Medium height 1st sowing : 230 cm

2nd sowing : 130 cm

Medium diameter of stem 1st sowing: 22 mm

2nd sowing: 15 mm

Stem humidity 1st sowing: 77%

2nd sowing: 79%

Leaves humidity 1st sowing: 81%

2nd sowing: 82%

CONCLUSIONS

Water stress period in June and July;
High quantity of ramified stems;
High humidity of the plant;
Leaves and stems green;

CONCLUSION



Biomass productions

...WILL BE CONTINUING