

BIOKENAF

QLK5-CT-2002-01729

INSTITUTO NACIONAL DE INVESTIGACIÓN Y
TECNOLOGÍA AGRARIA Y ALIMENTARIA (INIA)

DPTO. MEDIO AMBIENTE
ALCALA DE HENARES, MADRID



INIA

Dpto. Medio Ambiente
Alcalá de Henares (Madrid)

Task 2.3: Effect of irrigation and
nitrogen fertilization on biomass yields

SIA

Junta de Extremadura
Finca "La Orden", Badajoz

Task 2.2: Effect of different
sowing dates and plant population
on biomass yields

Field experiments in Alcalá de Henares, Madrid, Spain

Task 2.3: Effect of irrigation and nitrogen fertilization on biomass yields

- 4 irrigation levels X 3 nitrogen fertilization X 3 replicates

I-0: 0% of PET
I-25: 25% of PET
I-50: 50% of PET
I-100: 100% of PET

N-0: 0 kg N/ha
N-75: 75 kg N/ha
N-100: 100 kg N/ha

- kenaf variety: Tainung 2
- sowing date: 28/05/2003
- plant density: 200000 plants/ha

Task 2.2: Effect of different sowing dates and plant population on biomass yields

Sowing dates

- 2 sowing dates:
 - 28/05
 - 11/06
- Tainung 2
- 200000 plants/ha

Plant population

- 2 plant densities:
 - 200000 plants/ha
 - 400000 plants/ha
- Tainung 2
- sowing date: 28/05

varieties

- 2 kenaf varieties:
 - Tainung 2
 - Everglades 41
 - Salvador
- 200000 plants/ha
- sowing date: 11/06

Field experiments in Alcalá de Henares, Madrid, Spain

Measurements

Growth data

- Plant height
- Stem diameter

Plant productivity data

- Fresh weight of leaf, bark and core
- Dry weight of leaf, bark and core

Other measurements

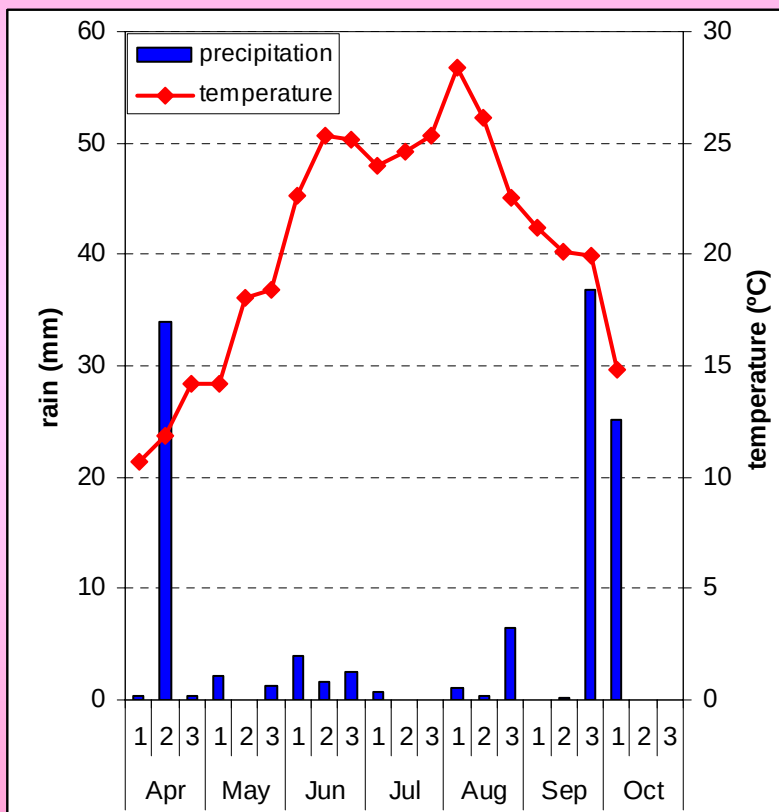
- Leaf area meter
- SPAD
- Canopy temperature
- Soil analysis
- Plant analysis (N, P, K)

Meteorological data

- Temperature
- Humidity
- Precipitation
- Evaporation
- Wind speed

Field experiments in Alcalá de Henares, Madrid, Spain

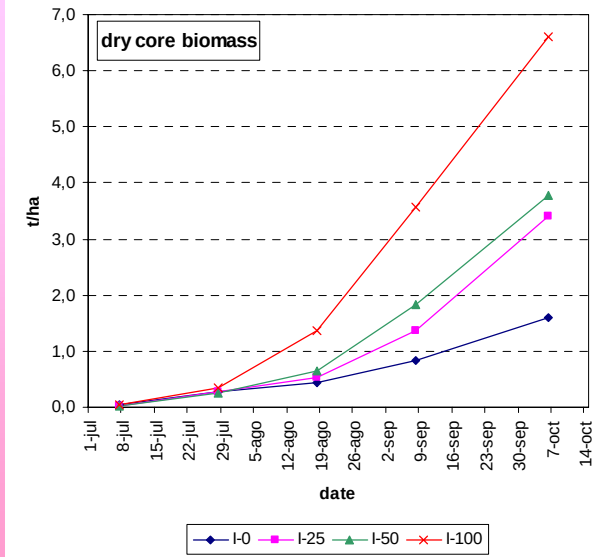
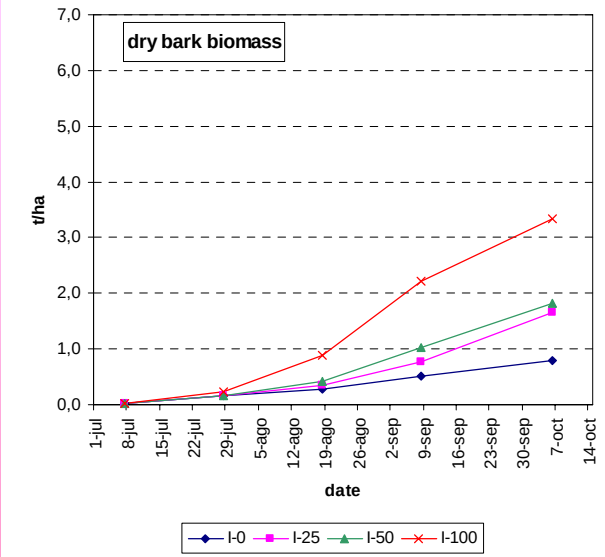
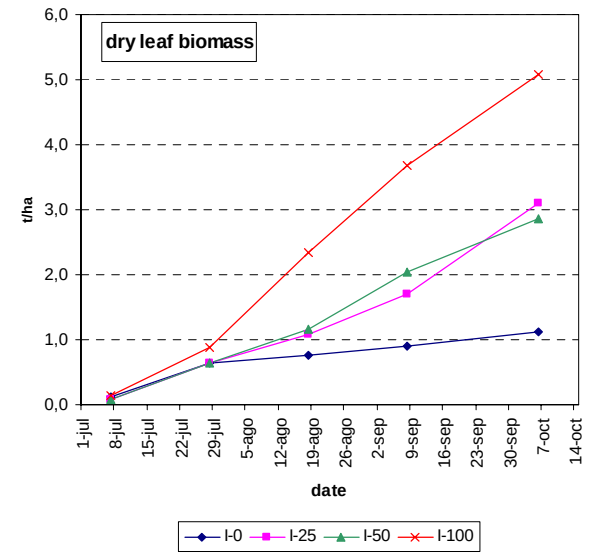
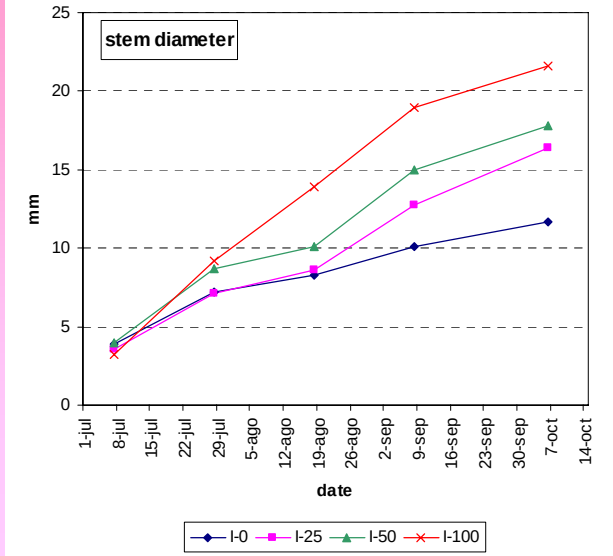
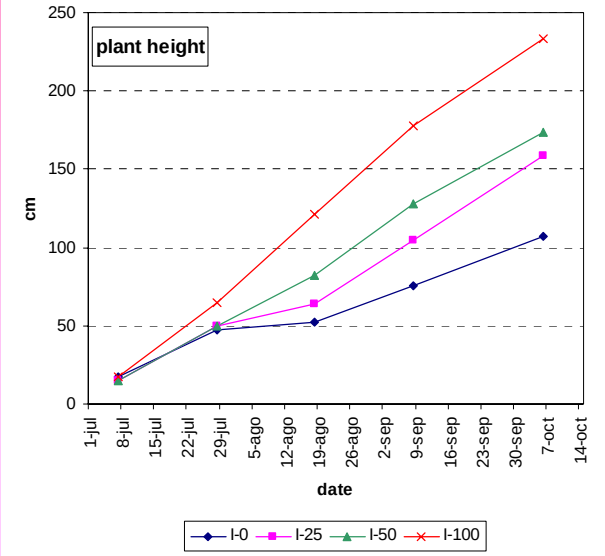
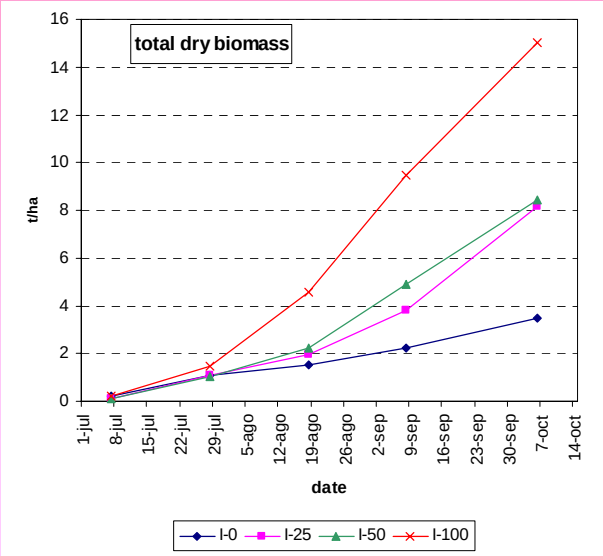
Climatic conditions during experimental essays



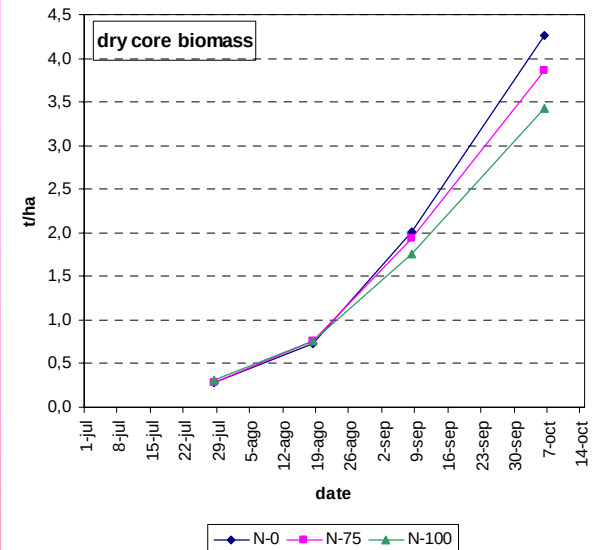
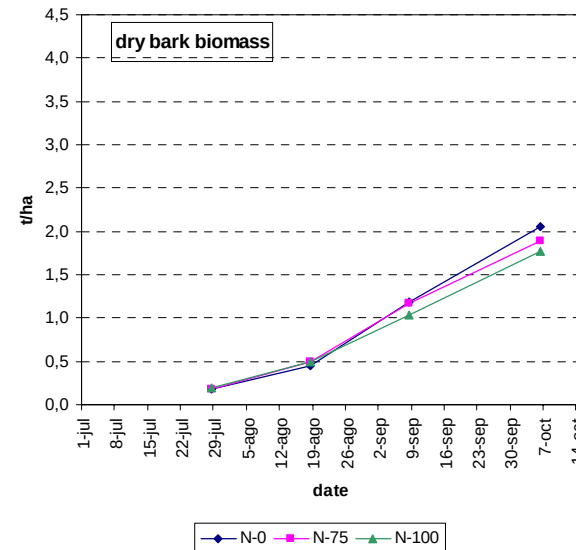
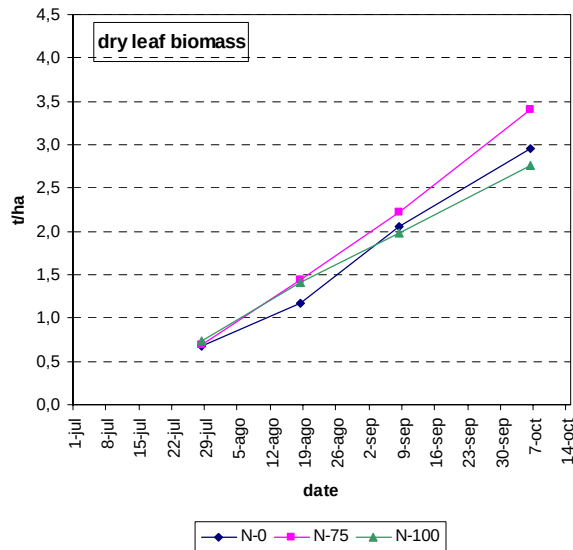
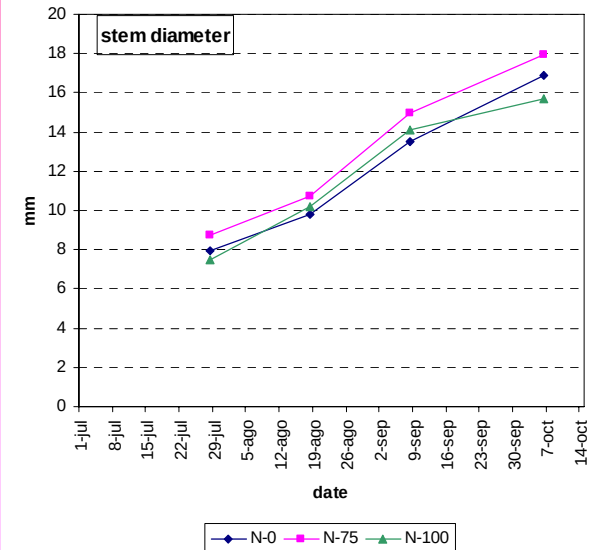
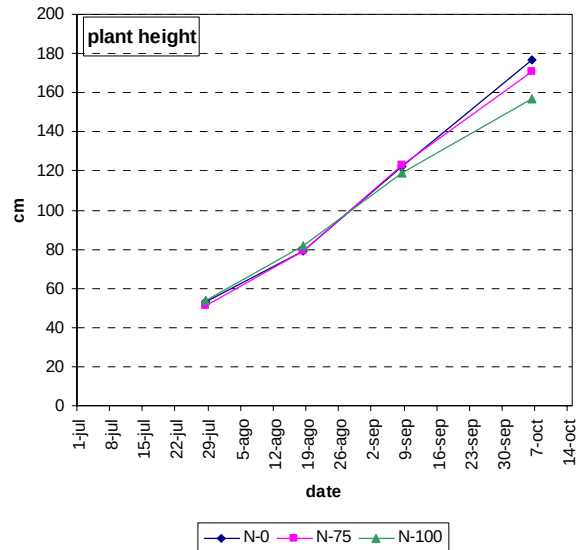
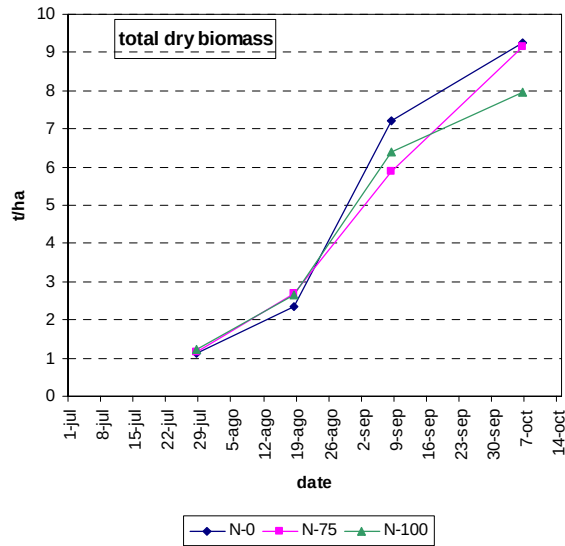
water supplied in each irrigation treatment

irrigation (l/m ²)	
I-0	0
I-25	147
I-50	294
I-100	589

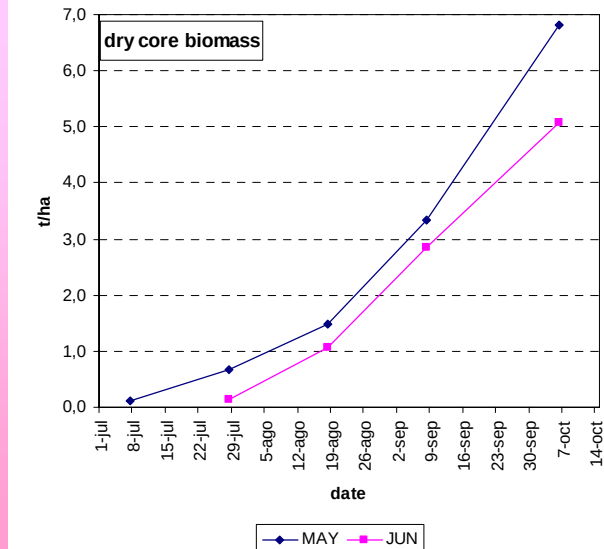
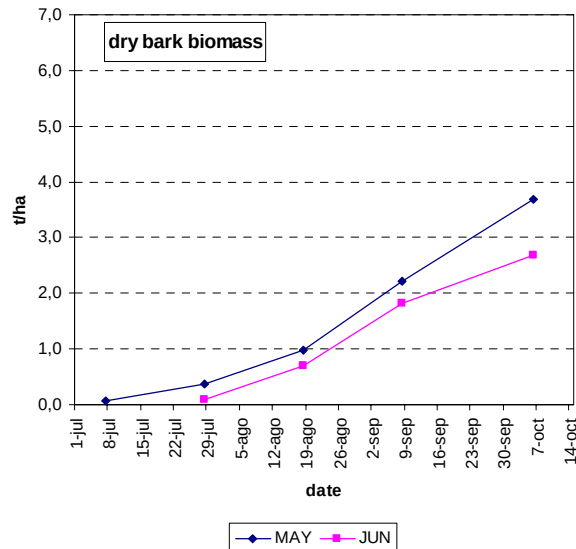
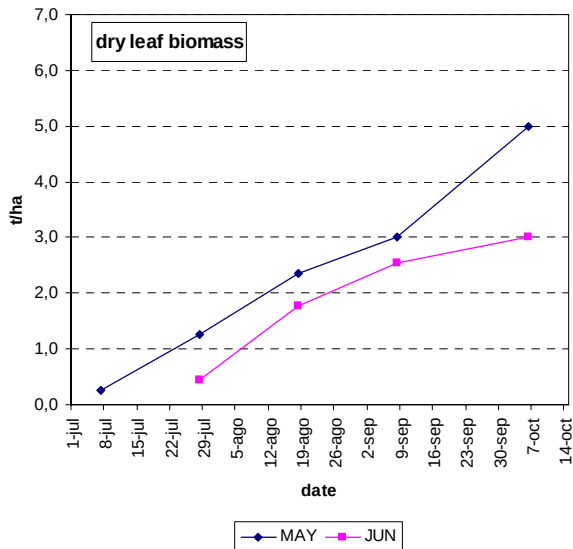
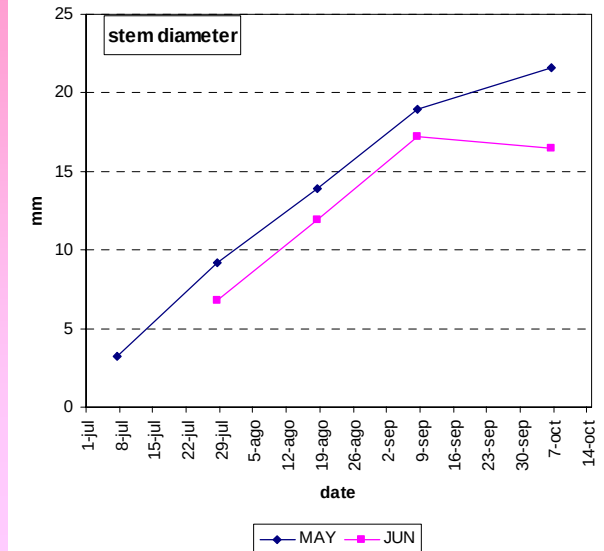
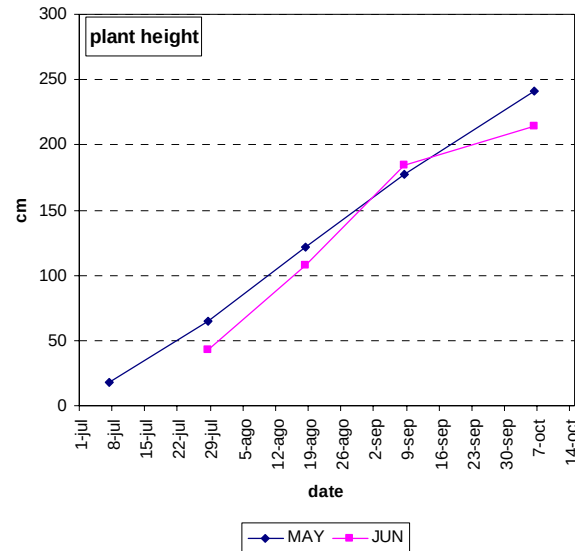
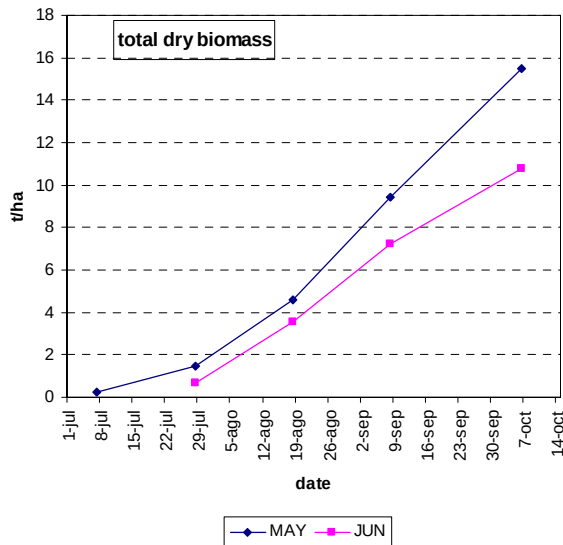
Effect of irrigation on plant growth and biomass yields



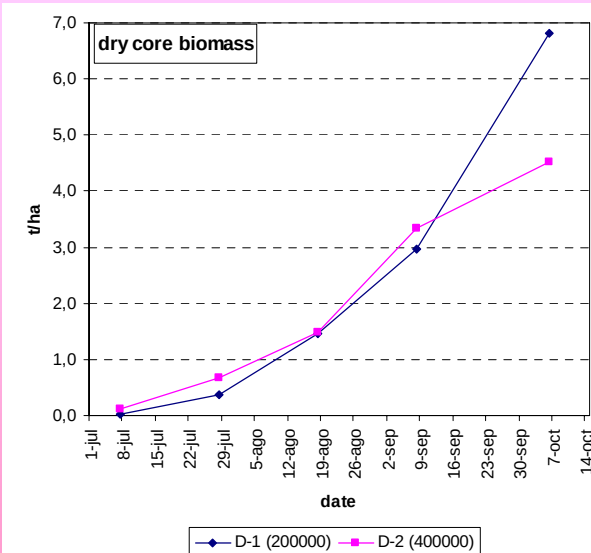
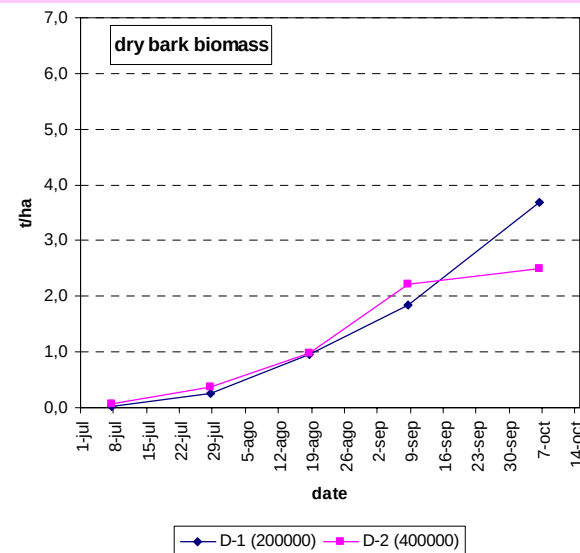
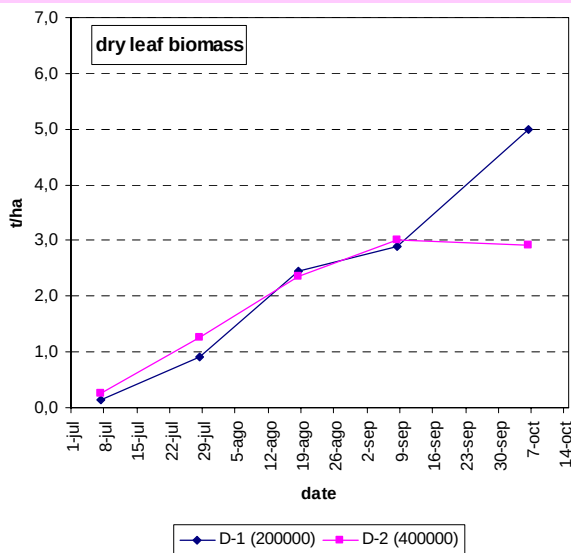
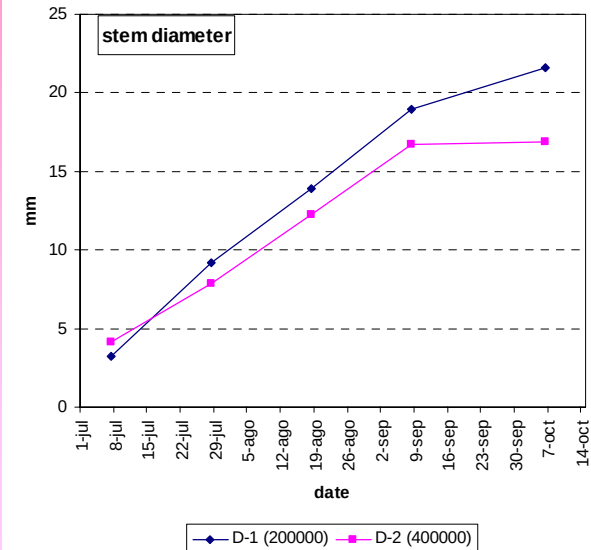
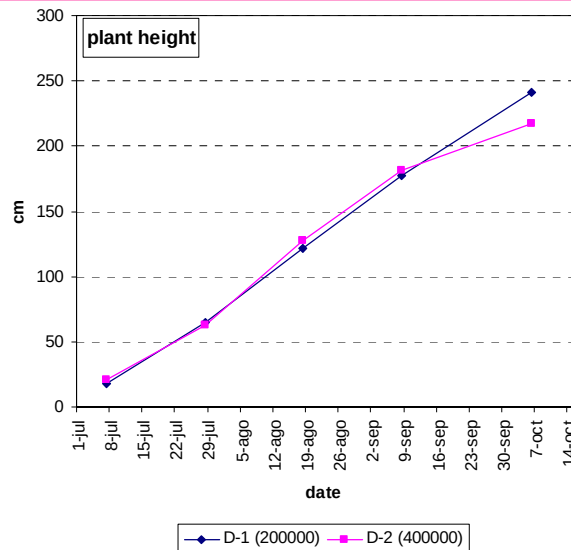
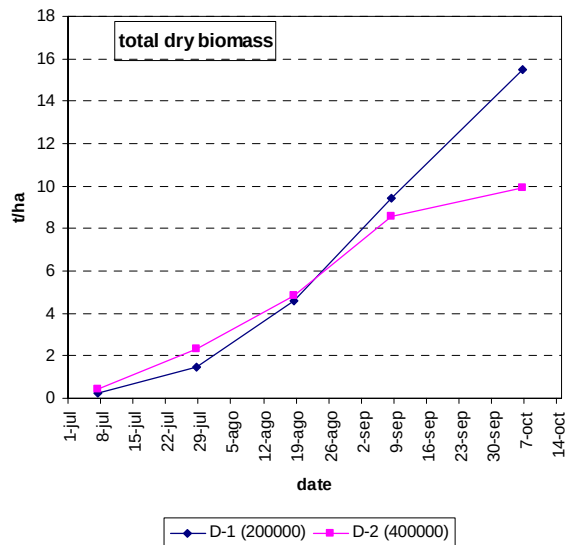
Effect of nitrogen fertilization on plant growth and biomass yields



Effect of sowing date on plant growth and biomass yields



Effect of plant population on plant growth and biomass yields



Effect of kenaf varieties on plant growth and biomass yields

