

"Training, Networking and Capacity Building for Sustainable Forestry in Povolgie"
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Recent developments in Italian silviculture systems

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Actual situation:

Forests are mainly located:

- mountains (59%)
- hills (36%)

With:

- Poor forest road network
- Fragmented forest properties (often less than 1 ha)
- Low profesionality of forest workers



53% of forest surface is managed with coppice system
only 43% by high forest
4% is Mediterranean bush land (macchia) (ISTAT, 2002).

So in Italy we have a lot of forests but with a very low quality wood production



More than 50% of quality wood is produced by the 3% of forest surface covered by artificial poplar stands



The aim of poplar cultivation with hybrid clones (eg I214) is:

To produce logs at least 4 m long with a diameter > 35 cm bhd

Plantation characteristics:

Composition: pure

Design: square or rectangle

Distances: 5x6 5x7 6x6

Rotation time: 10-14 years

Plantation density: 330 n/ha

Final density: 330 n/ha



In the last 20 years it has been introduced the production of wood of both high quality and woody biomass outside forest (on plane or with low slope stands)



Main characteristics of these stands:

Mixed stands with principal species (trees): walnut, cherry, ash, maple...
And secondary species (trees): poplar, willow, alder...
and bushes: Corylus, Sambucus ...

Rotation time: 20-40 (principal trees) 5-15 (secondary trees)

Plantation density: 800-1200 /ha

Final density: 80-300 /ha

Cultural operations:

pruning (first 4-5 years),

thinning (2 or 3 times),

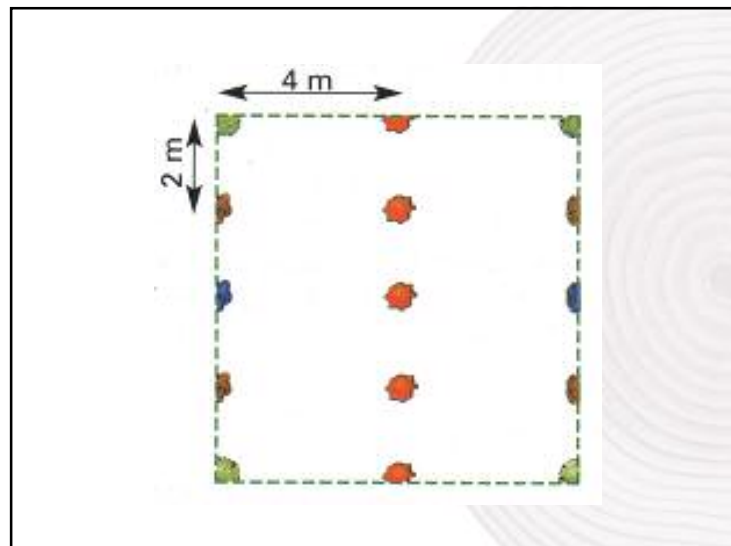
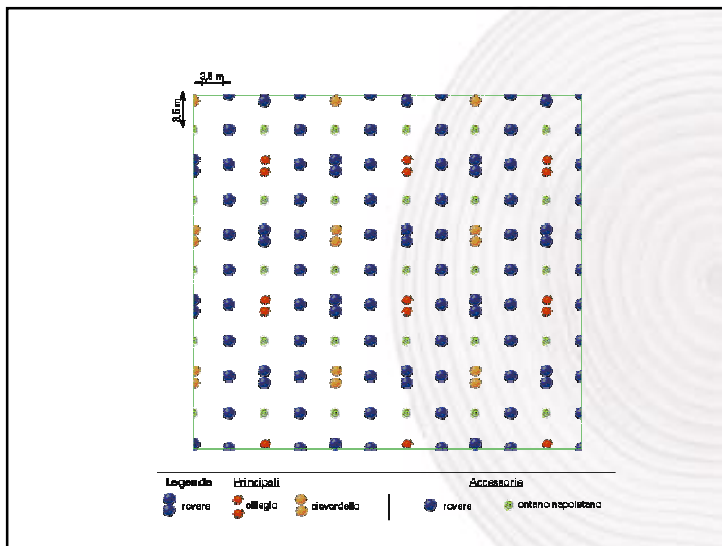
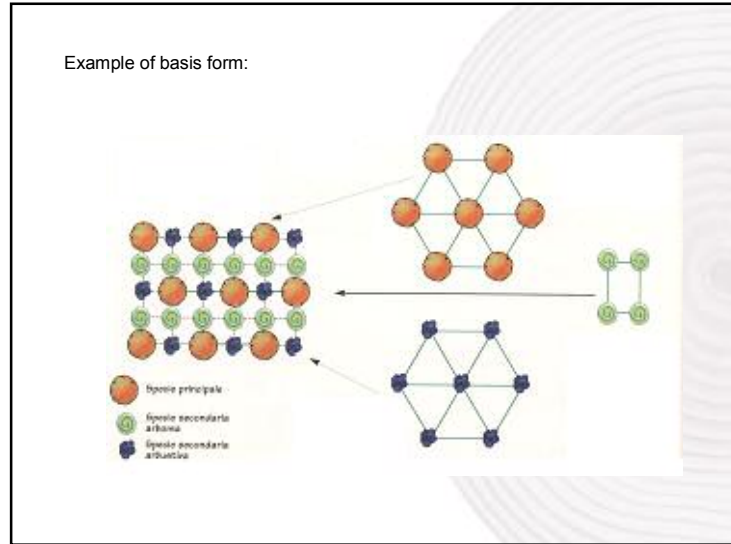
irrigation (the first plantation year)

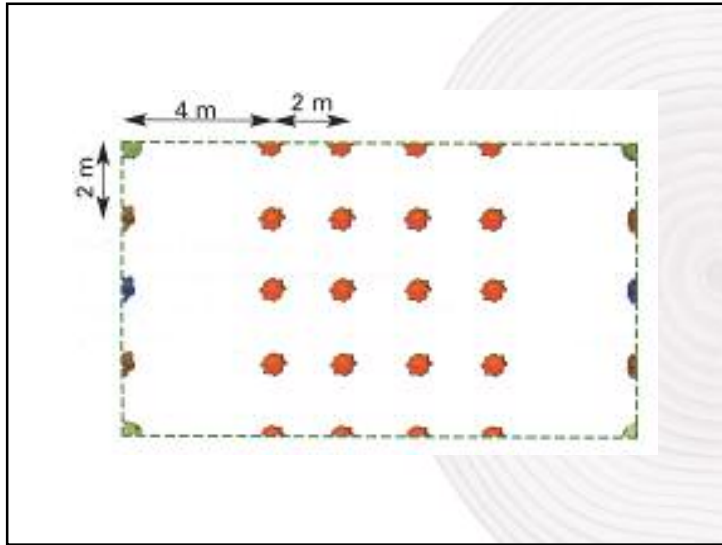
Production goals:

40 cm bhd and at least 3 m long logs (principal species)

Woody biomass (for energy) the secondary species







Thank you for your attention

