

Field data (Each questionnaire refers to one crop species cultivated per field)

Municipality : Assisi

Latitude : 41.871940

Longitude : 12.567380



Field Size (ha) 0.1

Crop Species

<input checked="" type="checkbox"/> olives	<input type="checkbox"/> vineyards	<input type="checkbox"/> apples	<input type="checkbox"/> pears
<input type="checkbox"/> peaches	<input type="checkbox"/> apricot	<input type="checkbox"/> nectarine	<input type="checkbox"/> plum
<input type="checkbox"/> cherries	<input type="checkbox"/> oranges	<input type="checkbox"/> tangerines	<input type="checkbox"/> lemons
<input type="checkbox"/> grapefruit	<input type="checkbox"/> hazelnuts	<input type="checkbox"/> chestnuts	<input type="checkbox"/> almonds

Variety of crop Leccino

Age of crop 11

Density of crop (trees/ha) 330

Width between cultivated rows (m) 5.5

Distance between trees (m) 5.5

Crop form

Crop forms for vineyard



Vase



Espalier



Marquee

Crop forms for Olive



Ancient olives



Vase (1 stem)



Vase (2-3 stems from soil)



Bush (intensive 250-600 trees/ha)



Superintensive (>1500 trees/ha)

Crop forms for fruit trees



Natural



Vase



Bush/Globe (very small trees)



Spindle/Pyramid



Palm/Fan



Epsilon transversal

Slope (%)

Soil Cover



Bare.No grass cover.
Tillage several times per
year



Seasonal occurrence.
Herbicides+mowing <50%
soil cover



>50% grass cover.
Mowed several times per
year



100% Grass cover.
Mowed several times per
year

Crop Yield

Average Crop yield (t/ha) _____

Irrigation

- rain fed
 partial irrigation
 fully irrigated

Intensification degree

Specify the amount of fertilizer and pesticides

- organic
 low
 intermediate
 high

Plantation Removal Information

Were the plants removed at a typical age for such crops ?

- Yes
 Older than typical
 Younger than typical
 Don't know

Reason for plantation removal

- Old age (renovation)
 Change of crop
 Change of variety
 Change of planting pattern
 Plant disease

Equipment for uprooting

- Felling with chainsaws
 Uprooting with excavators

Intended use of the plantation

Check how do you manage/use the plantation removal wood for each part of the plantation. Check as many as apply

	Roots	Stems	Thick branches	Fine branches
Abandoned at field side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Burnt in fires at open air	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mulched as soil cover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shredding and integration to soil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Firewood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specify the minimum diameter you consider for 'thick' branches used as firewood (mm) _____

Cost for removing 1 hectare when contracted to a company (€/ha) _____

Date of Measurement
(DD/MM/YY)

Mode of measurement
Specify the method used for
plantation removal measurement

Per tree



One or several single trees selected. Biomass per tree collected manually and weighted

Number of trees : 3

Per parcel (e.g. 100m²) in bags



One or several parcels selected. Each parcel several trees. Biomass per parcel collected manually and weighted

Per several rows (or in whole field)



On large parcel, or a whole field is selected. Biomass collected and loaded to a truck. Weight of the load taken on a scale for trucks

Amount of plantation removed

Specify the tonnes per hectare of plantation removed and measured. Specify the moisture content if available. Check which part of the plantation is measured and the form of the material-"A":whole piece, "B":chips. Check as many as apply

	Part of plantation measured	Amount (t/ha)	Moisture content (%)	Form of material: A B	
Full tree (high content of soil)	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Full tree (low content of soil; roots have been cleaned/shaked)	<input checked="" type="checkbox"/>	52.81	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Only tree base and root (with much soil)	<input checked="" type="checkbox"/>	13.36	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Only the tree base and root (high content of soil)	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Only aerial part (stem+branches)	<input checked="" type="checkbox"/>	39.45	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Only stem	<input checked="" type="checkbox"/>	9.20	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Only branches	<input checked="" type="checkbox"/>	30.25	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Only stem + thick branches	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Losses of biomass after harvesting

(%) _____ or (tonnes/ha) _____

Stefania Proietti, Paolo Sdringola, Umberto Desideri , Francesco Zepparelli, Antonio Brunori, Luana Ilarioni, Luigi Nasini, Luca Regni, Primo Proietti, Carbon footprint of an olive tree grove, Applied Energy, Volume 127, 15 August 2014, Pages 115–124.

The moisture content is considered in proportion of 50% because in the above article the author did not mention it.

As for the parts of the plantation that are measured they consisted from:

Full tree: Roots, Root collar, Stem, Branches, Leaves, Twings and Prunings

Branches: Branches, Prunings, Leaves and twings.

