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(54) RASPBERRY PLANT NAMED ‘ATENA’

(50) Latin Name: *Rubus idaeus* L.
Varietal Denomination: **Atena**

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patent is extended or adjusted under 35
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USPC **Plt./204**
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(58) **Field of Classification Search**
USPC Plt./156, 203, 204
See application file for complete search history.

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(57) **ABSTRACT**

A new a primocane raspberry cultivar named ‘Atena’ having
good fruit colour and flavour, large and very firm berries is
disclosed. The new cultivar has the advantages of producing
fruits that are very easy to pick and produces two crops per
year, where the fruits mainly ripen on current season’s cane
in autumn.

4 Drawing Sheets

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Genus and species: *Rubus idaeus* L.
Variety denomination: ‘Atena’.

BACKGROUND OF THE NEW VARIETY

A new and distinct cultivar of red raspberry (*Rubus idaeus*
L.) hereinafter referred to by the cultivar denomination
‘Atena’ is disclosed. The new variety ‘Atena’ was obtained
from the controlled cross between the varieties ‘Dolomia
Plus’ (mother plant) (not patented) and ‘Erika’ (father plant)
(U.S. Plant Pat. No. 20,841).

The crossing for the new cultivar occurred in year 2007 in
Altopiano della Vigolana (Trento—Italy) and it has been
subject to selection in 2008, and successively tested until
2017. The characteristics of the new cultivar have been
found stable and have been transmitted without change
through succeeding (more than 9 years) asexual propaga-
tions by root cutting.

Plant breeder’s rights were applied for with the European
Union on Jan. 18, 2018. ‘Atena’ has not been made publicly
available.

SUMMARY OF THE INVENTION

The most outstanding and distinguishing characteristics
of the cultivar ‘Atena’ are hereunder reported.
Primocane raspberry plant;
Good fruit colour and flavour;
Very firm light red fruits;
Easy to pick up (low adherence to plug).
The new variety produces two crops per year and the
fruits mainly ripen on current season’s cane in autumn.

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The new variety can be propagated by: the use of suckers
produced in a spawn-bed, root cutting and use of tissue
culture techniques. The root cutting is to be preferred.

5 BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The new red raspberry cultivar ‘Atena’ is illustrated by the
accompanying photographs showing typical specimens of
the new variety in colour as true as reasonably possible to
make the same colour illustrations of this character by
conventional photographic procedures. The photographs are
of plants that are from four to six months old.

FIG. 1 is a view showing the raspberry plants with
ripening fruit. The upright, tall plants and vigorous laterals
can be appreciated.

FIG. 2 is a view showing the leaf upper and lower
surfaces.

FIG. 3 is a view showing the plant primocane internode
length and cane colour.

FIG. 4 is a view showing the ripe fruit size and shape.

DETAILED DESCRIPTION

The following detailed description set forth the distinctive
characteristics of the new variety Atena. The performance of
new cultivar for retention of its distinctive characteristics
has been evaluated through successive asexual propagations
by root cutting in the Applicant’s setting in Altopiano della
Vigolana, Trentino Region (Italy) under natural conditions
in plastic covered high tunnels. The growing was in soils
using coir as substrate.

* Colour references made to R.H.S. Colour Chart of The
Royal Horticultural Society of London (Edition V)

The plant assessment was performed for 2 years. Botanical descriptions are for plants 4-6 months old.

Classification:

- Family.—Rosaceae.
- Botanical.—*Rubus idaeus* L.
- Common name.—Raspberry.

Parentage: ‘Dolomia Plus’ x ‘Erika’.

Plant:

- General habit.—Upright canes; strong vigor; good roots system; adapted to winter conditions such as those at Altopiano della Vigolana (average min temperature 1° C.; average max temperature 5° C.); quite resilient to summer heat (average min temperature 13° C.; average max temperature 27° C.) high productivity in autumn.
- Average height (average).—1.80-2 m.
- Spread (average).—0.90 m.
- Shape.—Conical.
- Vegetative bud length.—Medium 3.0-5.0 mm.

Primocane:

- Length (average).—1.80-2.0 m.
- Diameter (average) at 1.0 m height.—0.8-1.0 cm.
- Texture.—Smooth.
- Internode length (average) at 1.0 m height.—6-7 cm.
- Number of fruiting laterals per cane (average).—13-14.
- Number of current season’s shoots.—Few to medium.
- Young shoot colour.—*RHS: 140A.
- Dormant cane colour.—*RHS: 185A.
- Cane colour.—*RHS: N144C.
- Spines.—Present.

Spines:

- Shape.—Conical.
- Size (average).—1.0-1.5 mm.
- Density (average) at 1.2 m.—3 per cm².
- Colour.—*RHS 59A.

Foliage:

Leaves:

- Shape.—Compound; odd-pinnate and subdivided in 3-5 ovate and doubly serrate leaflets.
- Profile in cross section.—Concave.
- Rugosity.—Moderate.
- Complete leaf.—Length: 30.5 cm. Width: 19.8 cm.
- Number of leaflets: 3-5.
- Upper surface colour.—*RHS 139B.
- Lower surface colour.—*RHS 137D.
- Lateral leaflets.—Specular.
- Lateral leaflets average size.—Length: 11.0 cm. Width: 6.5 cm.
- Lateral leaflets apex shape.—Pointed.
- Lateral leaflets base shape.—Ovate.
- Lateral leaflets margin type.—Doubly serrate.
- Terminal leaflets average size.—Size: Length: 13.5 cm. Width: 8.3 cm.
- Terminal leaflets apex shape.—Pointed.
- Terminal leaflets base shape.—Ovate.
- Terminal leaflets margin type.—Doubly serrate.

Petiole:

- Average length.—8.7 cm.
- Average diameter.—0.3 cm.
- Colour.—*RHS 137D.

Inflorescence:

- Average length.—56.5 cm.
- Average diameter.—32 cm.

Flowers:

- Number per plant (average).—250.
- Length (average).—9.50 mm.
- Diameter (average).—30.35 mm.
- Diameter (receptacle).—8.10 mm.
- Shape.—Pentagonal.
- Petal colour (upper surface).—*RHS: NN155B.
- Petal colour (lower surface).—*RHS: NN155C.
- Petal number (average).—5.
- Petal shape.—Obovate. Apex: rounded. Base: cuneate.
- Margin: entire.
- Sepal number (average)—5. Colour (upper surface): *RHS: 142C. Colour (lower surface): *RHS: 142D.
- Length (average): 1.2 cm. Width (mid part): 0.5 cm.
- Fragrance.—Absent.
- Blooming.—July-August.
- Pedicel length (average).—2.5 cm.

Fruit:

- Predominant shape.—Elongated conical.
- Weight.—5.5 g.
- Size.—Length 2.7 cm. width 2.2 cm.
- Colour of ripe fruit.—*RHS 45D.
- Colour of immature fruit.—*RHS 41D.
- Firmness.—Very firm (0.06 kg).
- Drupes per fruit (average).—105.
- Drupe size.—Length: 3.9 mm. Width: 3.6 mm. Depth: 5.9 mm.
- Glossiness.—Medium.
- Adherence to plug.—Low.
- Titrateable acidity.—31.93 meq/hg.
- Soluble solids.—7.6° Brix.
- Yield.—4.7 Kg/m (3 plants/m).
- Main bearing type.—On current year’s cane in autumn from half August to late October.
- Use/market.—Suitable for consumption as high grade fresh fruit and also amenable to processing.
- Keeping quality.—The fruit colour is stable during the storage.
- Storage capacity (shelf life).—Good shelf-life.
- Shipping quality.—Good; the attitude to storability permits shipping.

Reproductive organs:

- Pistil number per flower (average).—117.
- Pistil size (average).—4.41 mm.
- Stamen number per flower (average).—90.
- Stamen size (average).—4.82 mm.

Seeds:

- Size (average).—Length: 3.41 mm. width: 2.06 mm.
- Shape.—Kidney-shaped.

COMPARISON WITH PARENTAL AND COMMERCIAL CULTIVAR

TABLE 1

Comparison table between variety and commercial cultivar ‘Evita’ (U.S. Plant Pat. No. 25,695)			
Characteristic	‘Evita’	‘Atena’	
fruit color	Orange Red	Light red	
Plant (size/vigour)	1.70-1.90 m	1.80-2.00 m	
Fruit: firmness	Firm	Very firm	
Fruit shape	Slight irregular very elongated conical	Very regular Elongated conical	
Fruit picking	Slight difficult	Very easy	

TABLE 2

Comparison table with parental cultivars		
Characteristic	‘Erika’ (female parent)	‘Atena’
Fruit color	Red (RHS53A)	Strong red (RHS45D)
Fruit shape	Broad-conical	Elongated-conical
Plant vigour	Medium	Strong
Canes colour	Yellow Green (RHS144A)	Strong Yellowish Green (RHS144C)
Spines	Thin and dense	medium sparse
Fruit firmness	Medium firm	Very firm

TABLE 2-continued

Comparison table with parental cultivars		
Characteristic	‘Dolomia Plus’ (male parent)	‘Atena’
Fruit color	Strong red (RHS45A)	Strong red (RHS45D)
Fruit shape	Conical	Elongated-conical
Plant vigour	Strong	Strong
Canes colour	Reddish green (RHSN144A)	Strong Yellowish Green (RHS144C)
Spines	Thin medium dense	medium sparse
Fruit firmness	Firm	Very firm

What is claimed:
1. A new and distinct cultivar of raspberry plant as substantially herein shown and described.
* * * * *

Figure 1



Figure 2

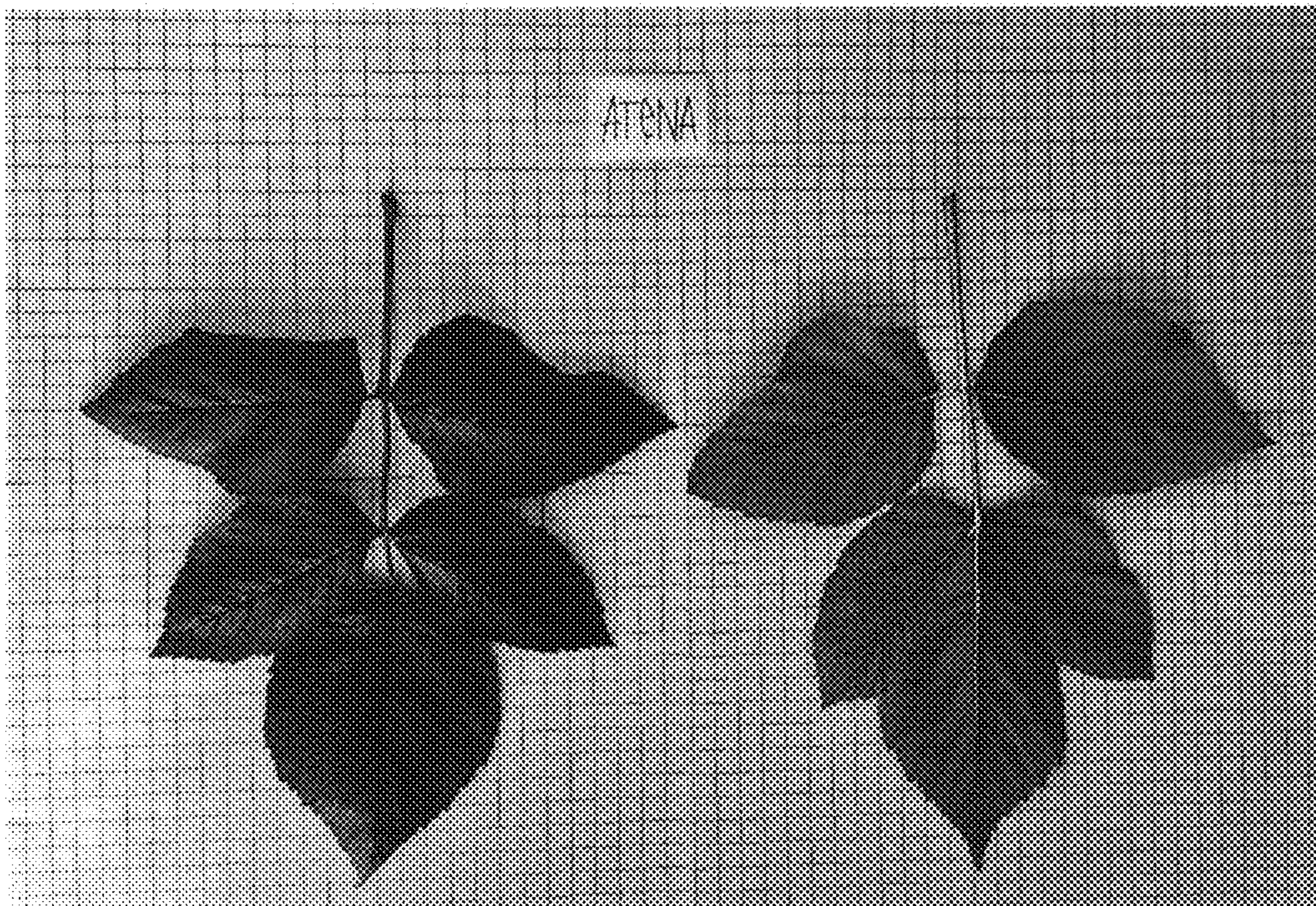


Figure 3

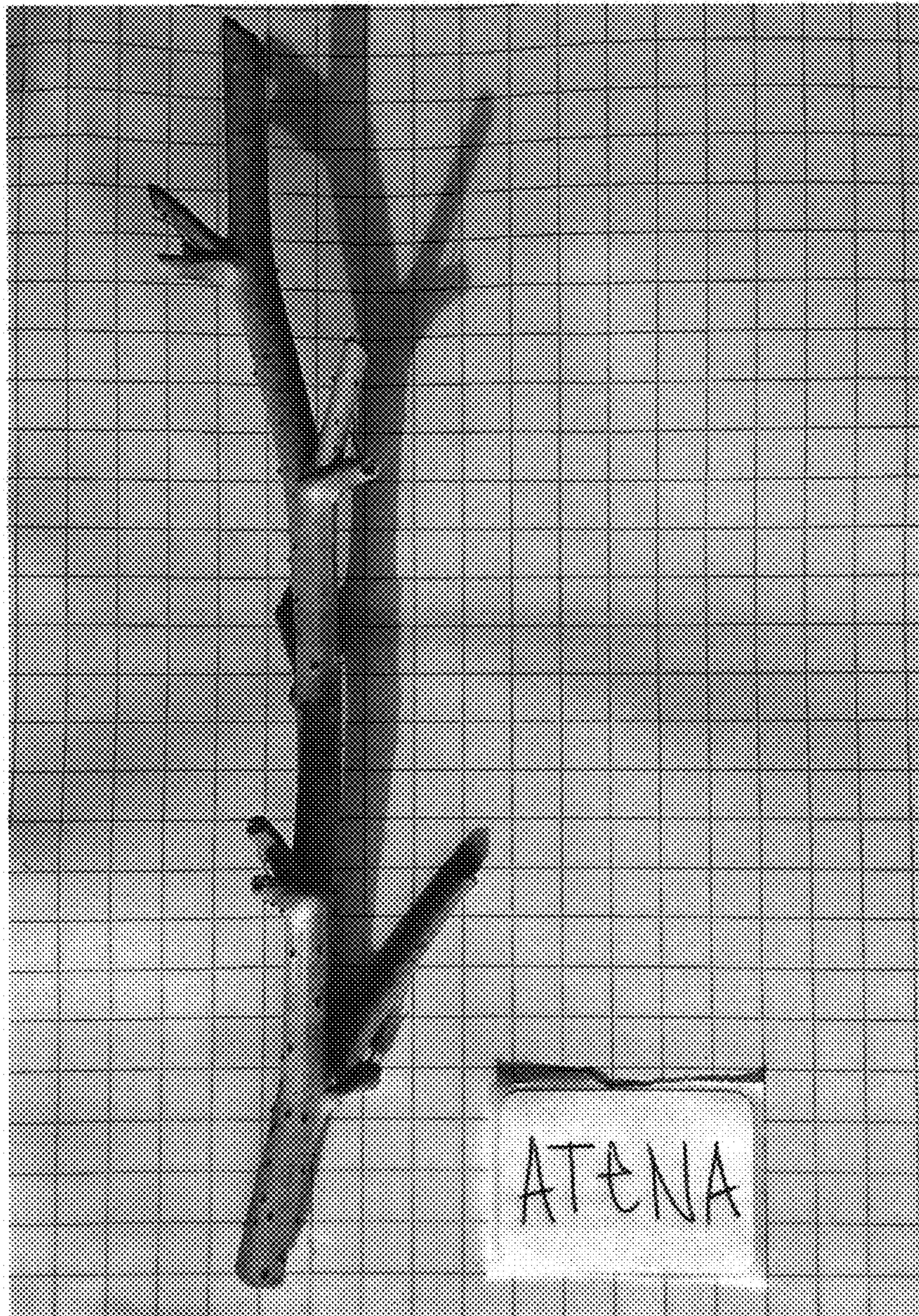


Figure 4

