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Houbraken

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(54) *BIDENS FERULIFOLIUM* PLANT NAMED
‘BIDTIS-1’

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patent is extended or adjusted under 35
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(51) **Int. Cl.⁷** **A01H 5/00**

(52) **U.S. Cl.** **Plt./263**

(58) **Field of Search** **Plt./263**

(56) **References Cited**

U.S. PATENT DOCUMENTS

P.P. 11,261 * 3/2000 Theobald Plt./263

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(57) **ABSTRACT**

A new *Bidens* plant particularly distinguished by its upright
character, compact plant habit, reduced seed set and golden
yellow flowers. Flowering time is from April till November,
depending on the temperature. Better resistance to *Botrytis*
and Powdery mildew than *Bidens ferulifolium*.

2 Drawing Sheets

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BACKGROUND OF THE NEW PLANT

The present invention comprises a new distinct cultivar of
Bidens, botanically known as *Bidens ferulifolium*, native to
South USA and Mexico, and hereinafter referred to by the
cultivar name ‘Bidtis 1’.

The new *Bidens* was discovered by the inventor in a
controlled environment in Enkhuizen, the Netherlands, as a
naturally-occurring mutation of the *Bidens ferulifoium*
‘Golden Eye’ (unpatented). The new *Bidens* was observed as
a single plant in a large population of plants of the parent
cultivar.

The instant plant was grown under natural Dutch green-
house spring conditions. The day/night temperature was
16/14° C. The light level was very much dependent on the
weather. No extra light or growth regulators were applied.
This new plant is an annual.

DESCRIPTION OF THE NEW CULTIVAR

The following detailed descriptions set forth the distinc-
tive characteristics of this new *Bidens* plant. ‘Bidtis 1’ has
been reproduced by terminal cuttings in Enkhuizen, the
Netherlands, and all of the characteristics thereof have been
determined to be firmly fixed. From December 2000 on, the
variety is also intiated in tissue culture at SBW lab in
Roelofarendsveen, the Netherlands, to maintain the variety.
The plant history was taken on 5 months old plants, grown
in a greenhouse in Enkhuizen.

Color references are primarily to the R.H.S. Color Chart
of The Royal Horticultural Society of London.

DESCRIPTION OF THE DRAWINGS

This new *Bidens* plant is illustrated by the accompanying
photographic drawings which shows blooms, buds and foli-
age of the plant in full color, the color shown being as true
as can be reasonably obtained by conventional photographic
procedures.

The plant was grown at day/night temperatures of 16/14°
C. No growth regulators were applied. The plant was
pinched one time to stimulate branching.

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PLANT DESCRIPTION

Classification — Botanical: *Bidens ferulifolium*.
Parentage selection from: *Bidens* ‘Golden Eye’.

5 Growth habit: Very compact, upright.
Plant height: 15–30 cm.
Spreading area of plant: 50–80 cm.
Growth rate: Compact.
Length of petiole: 1–2 cm.

10 Width/diameter of petiole: 1–2 mm.
Phyllaries: 4–5 mm.
Fruits: No fruits available.
Strength: Good tolerance for not-optimal conditions like
heat, cold, dry conditions.

15 Branching character: Freely branching, very dense and
bushy.
Branching: Number of branches per plant is very much
depending on the number of pinchings. After 1 pinching
there are approximately 5 to 10 branches on a 10 weeks-
old-plant. After 17 weeks (and two times of pinching) the
variety had 20 branches per plant.

20 Blooming period: Year round flowering depending on
temperature, frost sensitive. ‘Bidtis 1’ can tolerate a little
bit of frost for a short time (down to –2° C.). Maximum
tolerated temperature is unknown, but it can stand the heat
very well.

25 Rooting time: Initiation time: Summer: 14 days, Winter: 17
days. Development time: Summer: 17 days, Winter: 21
days. Soil temperature should be around 21° C., air
temperature around 17° C.

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COLORS

35 Older stems: Between 59A and 183B.
Stems: 152A.
Leaf veins: 137C.
Petioles: 199B.
Pollen: 23A.
40 Pistil: 17C.
Fruits: Sterile/no seed set.
Phyllaries: 147A.

STEM DESCRIPTION

Diameter: 1–2 mm.
Shape: Cylindrical.
Anthocyan pigmentation: Present in older stems.
Length of internode: Varying from 2.5–4 cm grown under Dutch spring conditions. Under low light conditions the internode length will be longer than under high light conditions.
Pubescence: Little white hairs (about 1 mm) About 100 hairs on 1 cm².

FOLIAGE DESCRIPTION

Phyllotaxis: Opposite, but alternate on flower stems.
Shape of leaf: 2-pinnate fern-like leaves.
Texture: Smooth young leaves.
Length: 10–35 mm.
Width: 5–20 mm.
Depth of incision: Fully incised.
Color:
Upper side.—137B.
Lower side.—137D.
Length of leaf stem: 5–15 mm.

FLOWER BUD DESCRIPTION

Pedicel length: 30–80 mm.
Size:
Diameter.—3–4 mm.
Length.—3–4 mm.
Shape: Oblong.

FLOWER DESCRIPTION

Lastiness of bloom: Approximately 3 weeks.
Number of flowers per plant: First flowers occur after 10 weeks growth. There are 20–30 flowers per plant after 17 weeks growth.
Direction: Ascending.
Shape of florets:

Ray.—Ovate with 2 light furrows.
Disc.—Tubular.
Disc floret size: 4–5 mm.
Disc floret number per flower head: ± 50 .
Diameter total flower head: 20–40 mm.
Borne: Solitary.
Form: Capitulum with 1 series of ray florets and more series of disc florets.
Flower color:
Ray flower.—Yellow 12A.
Disc flower.—Yellow orange 17A.
Overlapping of ray florets: Separate ray florets, but little overlap in flower head.
No. of ray florets: 5.
Receptacle shape: Brush-shape.
Receptacle height: 5 mm.
Involucre: Bracts in 2 series.
Size of the ray floret:
Length.—8–15 mm.
Width.—5–10 mm.
Fragrance: Weak.
Reproductive organs:
Size.—Pistil= ± 5 mm long, anther= ± 3 mm long.
Shape.—Stigma is decurrent.
Number.— ± 50 –60 florets with pistils and anthers per flower head.
Color.—Pollen 23A, pistil 17C.
Fertility.—Sterile.

PHYSIOLOGICAL AND ECOLOGICAL CHARACTERISTICS

Good tolerance to heat. Strong resistance to pests and diseases. ‘Bidtis 1’ is more resistant to Botrytis and Powdery mildew than *Bidens ferulifolium* in general.
We claim:
1. A new and distinct variety of Bidens plant, substantially as herein illustrated and described, characterized particularly as to novelty by its compact, upright plant habit with short internodes and bright golden yellow flowers.

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