A REPORT OF THE

SUNFLOWER VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

SUNFLOWER VARIETY REVIEW BOARD REPORT ©2023

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The Association of Official Seed Certifying Agencies (AOSCA), Sunflower Variety Review Board (SFVRB), reviewed the following varieties on April 13, 2023. The Board recommended the inclusion of these varieties for certification. Seed of these varieties may be certified, providing production meets all standards of the Seed Certifying Agency of the jurisdiction in which the seed is grown.

All variety information, including descriptions, claims, and research data to support any claim, was supplied to the Sunflower Variety Review Board by the applicants. The Sunflower Variety Review Board makes judgments regarding recommendation of varieties for inclusion into certification based on the data supplied. Beyond that, the Sunflower Review Board takes no position on the accuracy or truthfulness of any description or claim made by the applicants.

Further information on current procedures, application forms, and detail regarding the Sunflower Variety Review Board can be obtained from:

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Respectfully submitted,

Ashley Koala, Chairman  
Sunflower Variety Review Board
# 2023 AOSCA SUNFLOWER VARIETY REVIEW BOARD

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Sunflower
KHE9411R (Exp.)

1. KHE9411R is a high oleic, tribenuron-methyl tolerant, oilseed restorer line developed by the pedigree method of selection from the cross KHE7030R/KHM7070R. KHE7030R and KHM7070R are proprietary lines, previously described and approved by the NSVRB.

2. Hybrids utilizing KHE9411R are adapted to sunflower growing regions of North America and SE Europe, the hybrids will be primarily for vegetable oil.

3. Flowering: medium
   Height: medium
   Branching Type: present, overall
   Distal Leaf Shape: narrow triangular to broad triangular
   Leaf Attitude: low
   Leaf Color: medium green
   Ray Flowers: medium, broad ovate, longitudinal recurved, medium
   Disk Flower Color: orange
   Pollen Color: Yellow
   Head Shape: weakly concave
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: none or very weakly expressed, between margin: none or very weakly expressed, black
   Leaf Blistering: weak
   Leaf Serration: medium
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with straight stem
   Seed Shape: ovoid elongated
   Seed Thickness: thin
   Hypocotyl Anthocyanin: absent

   List and describe variants and expected frequency. If none, state “none”. None expected.

4. KHE9411R is tolerant to tribenuron-methyl herbicide.

5. Breeders seed will be maintained by Nuseed Americas in nursery rows under bags, or by open pollination in isolated fields. Up to two generations beyond breeder's seed will be allowed for the production of foundation seed. Isolation and other requirements will be in accordance with the seed certification regulations of the state where it is produced.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? No

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? No

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 05/25/2023
Sunflower
7PBWG80B (Exp.)

1. 7PBWG80B is a linoleic oil type, imidazolinone tolerant maintainer line developed by Pioneer Hi-Bred International that derives from the backcross T1312LG *4/U1355CLLG. T1312LG & U1355CLLG are all Pioneer proprietary lines. U1355CLLG is an imidazolinone tolerant line used as the donor for herbicide tolerance. Selections were made for imidazolinone tolerance and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PBWG80B have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: late
   Height: short
   Branching Type: absent
   Distal Leaf Shape: broad triangular to rounded
   Leaf Attitude: High
   Leaf Color: dark green
   Ray Flowers: sparse, broad ovate, undulated, medium
   Disk Flower Color: Purple
   Pollen Color: Orange
   Head Shape: flat
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: strongly expressed, between margin: weakly expressed, grey
   Leaf Blistering: strong
   Leaf Serration: coarse
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: vertical
   Seed Shape: ovoid wide
   Seed Thickness: thick
   Hypocotyl Anthocyanin: present, weak

List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to Imidazoline.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PUPS58B (Exp.)

1. 7PUPS58B is a linoleic oil type maintainer line developed by Pioneer Hi-Bred International that derives from the cross PH689B/PH541B. Both PH689B and PH541B are Pioneer proprietary lines. Selections were made for oil content, self-fertility, recessive branching, acceptable plant stature and high yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PUPS58B have been tested in and adapted to the growing regions of Southern Africa and Argentina.

3. 
   - Flowering: medium
   - Height: medium
   - Branching Type: absent
   - Distal Leaf Shape: broad triangular
   - Leaf Attitude: medium
   - Leaf Color: dark green
   - Ray Flowers: medium, broad ovate, flat, medium
   - Disk Flower Color: orange
   - Pollen Color: Orange
   - Head Shape: weakly convex
   - Seed Outer Pericarp Color: medium brown
   - Stripe Appearance- on margin: strongly expressed, between margin: strongly expressed, white
   - Leaf Blistering: absent or very weak
   - Leaf Serration: fine
   - Ray Flower Color: medium yellow
   - Stigma Anthocyanin: absent
   - Pappi Color: Green
   - Head (neck) Attitude: half-turned down with curved stem
   - Seed Shape: ovoid wide
   - Seed Thickness: medium
   - Hypocotyl Anthocyanin: absent

List and describe variants and expected frequency. If none, state “none”: None

4. 7PUPS58B claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2024

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PYCB38B (Exp.)

1. 7PYCB38B is a linoleic oil type, tribenuron-methyl tolerant maintainer line developed by Pioneer Hi-Bred International that derives from the backcross 7PPHS11B *4/PH1031B. 7PPHS11B & PH1031B are all Pioneer proprietary lines. PH1031B is a tribenuron-methyl tolerant line used as the donor for herbicide tolerance. Selections were made for tribenuron-methyl tolerance and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PYCB38B have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: very late  
   Height: medium  
   Branching Type: absent  
   Distal Leaf Shape: lanceolate to narrow triangular  
   Leaf Attitude: High  
   Leaf Color: dark green  
   Ray Flowers: medium, narrow ovate, flat, medium  
   Disk Flower Color: orange  
   Pollen Color: Orange  
   Head Shape: weakly convex  
   Seed Outer Pericarp Color: black  
   Stripe Appearance- on margin: weakly expressed, between margin: none or very weakly expressed, grey  
   Leaf Blistering: weak  
   Leaf Serration: coarse  
   Ray Flower Color: medium yellow  
   Stigma Anthocyanin: absent  
   Pappi Color: Green=1  
   Head (neck) Attitude: half-turned down with curved stem  
   Seed Shape: ovoid wide  
   Seed Thickness: medium  
   Hypocotyl Anthocyanin: present, medium

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to Sulfonylurea.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023

Date Recommended by the VRB: 05/25/2023
Sunflower
7PKZZ62B (Exp.)

1. 7PKZZ62B is a linoleic oil type, tribenuron-methyl tolerant maintainer line developed by Pioneer Hi-Bred International that derives from the stack of backcross 7PKZZ62B *4/7PEKD82B/7PKZZ62B *4/7PNEK21B.
   7PKZZ62B, 7PEKD82B & 7PNEK21B are all Pioneer proprietary lines.
   7PEKD82B & 7PNEK21B are both a tribenuron-methyl tolerant lines used as the donor for herbicide tolerance. Selections were made for tribenuron-methyl tolerance, for stripped seed and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PKZZ62B have been tested in and are adapted to the growing regions of Central and Eastern Europe.

3. Flowering: very late
   Height: tall
   Branching Type: absent
   Distal Leaf Shape: broad triangular
   Leaf Attitude: High
   Leaf Color: medium green
   Ray Flowers: dense, broad ovate, flat, short
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: deformed
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: strongly expressed, between margin: strongly expressed, grey
   Leaf Blistering: medium
   Leaf Serration: medium
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with straight stem
   Seed Shape: rounded
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, medium

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to Sulfonylurea.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

   Date this application was submitted: 3/14/2023

   Date Recommended by the VRB: 05/25/2023
Sunflower
7PSQG46B (Exp.)

1. 7PSQG46B is a linoleic oil type, imidazolinone tolerant, maintainer line developed by Pioneer Hi-Bred International that derives from the cross PH693B/USDPURSUIT. PH693B is a Pioneer proprietary line. USDPURSUIT is a public line used as the donor for herbicide tolerance. Selections were made for imidazolinone tolerance, oil content, self-fertility, recessive branching, acceptable plant stature and high yield, as assessed in hybrid combination.

2. Hybrids utilising 7PSQG46B have been tested in and adapted to the growing regions of Southern Africa and Argentina.

3. Flowering: late
   Height: medium
   Branching Type: absent
   Distal Leaf Shape: narrow triangular to broad triangular
   Leaf Attitude: medium
   Leaf Color: light green
   Ray Flowers: medium, fusiform, longitudinal recurved, short
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: weakly convex
   Seed Outer Pericarp Color: whitesh grey
   Stripe Appearance- on margin: none or very weakly expressed, between margin: weakly expressed, brown
   Leaf Blistering: weak
   Leaf Serration: medium
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with straight stem
   Seed Shape: ovoid wide
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, weak

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to imidazolinone herbicide.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2024

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023

Date Recommended by the VRB: 05/25/2023
Sunflower
7PNEB57B (Exp.)

1. 7PNEB57B is a high oleic oil type, tribenuron-methyl tolerant maintainer line developed by Pioneer Hi-Bred International that derives from the backcross PH1023B *4/T1468LM. PH1023B & T1468LM are all Pioneer proprietary lines. PH1023B is a tribenuron-methyl tolerant line. Selections were made for tribenuron-methyl tolerance and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PNEB57B have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. 
   Flowering: very late
   Height: short
   Branching Type: absent
   Distal Leaf Shape: broad triangular to rounded
   Leaf Attitude: medium
   Leaf Color: medium green
   Ray Flowers: sparse, narrow ovate, flat, short
   Disk Flower Color: Purple
   Pollen Color: Orange
   Head Shape: weakly convex
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: strongly expressed, between margin: strongly expressed, grey
   Leaf Blistering: absent or very weak
   Leaf Serration: fine
   Ray Flower Color: orange yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with curved stem
   Seed Shape: ovoid wide
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, strong

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to Sulfonylurea.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

   Date this application was submitted: 3/14/2023

   Date Recommended by the VRB: 05/25/2023
Sunflower 
7PACJ20B (Exp.)

1. 7PACJ20B is a oleic oil type maintainer line developed by Pioneer Hi-Bred International that derives from the cross HS9089B/TRISOL600. HS9089B is a Pioneer proprietary line. TRISOL600 was a commercially available hybrid product from Argentina. Selections were made for oil content, high oleic content, self-fertility, acceptable plant stature and high yield, as assessed in hybrid combination.

2. Hybrids utilising 7PACJ20B have been tested in and adapted to the growing regions of Southern Africa and Argentina.

3. 
   Flowering: late  
   Height: very tall 
   Branching Type: absent 
   Distal Leaf Shape: narrow triangular to broad triangular 
   Leaf Attitude: High 
   Leaf Color: medium green 
   Ray Flowers: medium, narrow ovate, flat, medium 
   Disk Flower Color: orange 
   Pollen Color: Orange 
   Head Shape: weakly concave 
   Seed Outer Pericarp Color: medium brown 
   Stripe Appearance- on margin: strongly expressed, between margin: strongly expressed, grey 
   Leaf Blistering: weak 
   Leaf Serration: medium 
   Ray Flower Color: medium yellow 
   Stigma Anthocyanin: strong, present 
   Pappi Color: Green 
   Head (neck) Attitude: turned down with slightly curved stem 
   Seed Shape: ovoid wide 
   Seed Thickness: medium 
   Hypocotyl Anthocyanin: present, medium 

List and describe variants and expected frequency. If none, state “none”. None

4. 7PACJ20B claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2024

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PYHF53B (Exp.)

1. **7PYHF53B** is a linoleic oil type maintainer line developed by Pioneer Hi-Bred International that derives from the cross F1501LG/7PBMQ16B. F1501LG and 7PBMQ16B are all Pioneer proprietary lines. Selections were made for earlier flowering, shorter plant height, oil content and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PYHF53B have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. 
   - **Flowering:** medium
   - **Height:** medium
   - **Branching Type:** absent
   - **Distal Leaf Shape:** broad triangular to acuminate
   - **Leaf Attitude:** High
   - **Leaf Color:** dark green
   - **Ray Flowers:** medium, broad ovate, flat, medium
   - **Disk Flower Color:** Purple
   - **Pollen Color:** Orange
   - **Head Shape:** weakly convex
   - **Seed Outer Pericarp Color:** black
   - **Stripe Appearance- on margin:** weakly expressed, between margin: strongly expressed, grey
   - **Leaf Blistering:** weak
   - **Leaf Serration:** medium
   - **Ray Flower Color:** medium yellow
   - **Stigma Anthocyanin:** absent
   - **Pappi Color:** Green
   - **Head (neck) Attitude:** turned down with strongly curved stem
   - **Seed Shape:** ovoid wide
   - **Seed Thickness:** thin
   - **Hypocotyl Anthocyanin:** present, strong

   List and describe variants and expected frequency. If none, state “none”. **None**

4. This variety claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: **2023**

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? **No**

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? **Yes**

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? **Yes**

   Date this application was submitted: **3/14/2023**

   Date Recommended by the VRB: **05/25/2023**
Sunflower
7PLWC84B (Exp.)

1. 7PLWC84B is a linoleic oil type maintainer line developed by Pioneer Hi-Bred International that derives from the cross PH1015B /H1311LG. PH1015B and H1311LG are all Pioneer proprietary lines. Selections were made for earlier flowering, shorter plant height, oil content and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PLWC84B have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: medium
   Height: short
   Branching Type: absent
   Distal Leaf Shape: broad triangular to acuminate
   Leaf Attitude: High
   Leaf Color: dark green
   Ray Flowers: medium, broad ovate, flat, short
   Disk Flower Color: Purple
   Pollen Color: Orange
   Head Shape: flat
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: strongly expressed, between margin: weakly expressed, grey
   Leaf Blistering: weak
   Leaf Serration: coarse
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with curved stem
   Seed Shape: rounded
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, strong

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower

7PABZ55B (Exp.)

1. 7PABZ55B is a linoleic oil type, imidazolinone resistant, maintainer line developed by Pioneer Hi-Bred International that derives from the cross HS9036B*3/USDPURSUIT. HS9036B is a Pioneer proprietary line. USDPURSUIT is a public line used as the donor for herbicide resistance. Selections were made for imidazolinone tolerance and recurrent parent traits.

2. Hybrids utilising 7PABZ55B have been tested in and adapted to the growing regions of Southern Africa and Argentina.

3. 
   Flowering: late
   Height: tall
   Branching Type: absent
   Distal Leaf Shape: broad triangular
   Leaf Attitude: High
   Leaf Color: medium green
   Ray Flowers: medium, narrow ovate, longitudinal recurved, medium
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: weakly convex
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: none or very weakly expressed, between margin: none or very weakly expressed, grey
   Leaf Blistering: absent or very weak
   Leaf Serration: fine
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with curved stem
   Seed Shape: ovoid elongated
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, weak

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to imidazolinone herbicide

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2024

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PABE82R (Exp.)

1. 7PABE82R is an oleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross HS8117R/HL6062RHO. Both HS8117R & HL6062RHO are Pioneer proprietary lines. Selections were made for self fertility, acceptable plant stature, oil content, high oleic content and high yield, as assessed in hybrid combination.

2. Hybrids utilising 7PABE82R have been tested in and adapted to the growing regions of Southern Africa and Argentina

3. Flowering: late
   Height: tall
   Branching Type: present, predominantly apical
   Distal Leaf Shape: broad triangular
   Leaf Attitude: High
   Leaf Color: dark green
   Ray Flowers: medium, broad ovate, strongly recurved to back of head, medium
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: strongly convex
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: strongly expressed, between margin: strongly expressed, white
   Leaf Blistering: weak
   Leaf Serration: fine
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: turned down with strongly curved stem
   Seed Shape: ovoid elongated
   Seed Thickness: medium
   Hypocotyl Anthocyanin: absent

   List and describe variants and expected frequency. If none, state “none”. None

4. 7PABE82R claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2024

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PFQW09B

1. 7PFQW09B is a tribenuron-methyl tolerant maintainer line developed by Pioneer Hi-Bred International that derives from the cross F1501LG / EC1664SLB. F1501LG & EC1664SLB are all Pioneer proprietary lines. EC1664SLB is a tribenuron-methyl tolerant line used as the donor for herbicide tolerance. Selections were made for tribenuron-methyl tolerance, shorter plant height, drought tolerance, oil content and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PFQW09B have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: very late
   Height: medium
   Branching Type: absent
   Distal Leaf Shape: narrow triangular to broad triangular
   Leaf Attitude: High
   Leaf Color: medium green
   Ray Flowers: medium, broad ovate, flat, medium
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: weakly convex
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: weakly expressed, between margin: none or very weakly expressed, grey
   Leaf Blistering: weak
   Leaf Serration: coarse
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with straight stem
   Seed Shape: ovoid wide
   Seed Thickness: thin
   Hypocotyl Anthocyanin: present, strong

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to Sulfonylurea.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

   Date this application was submitted: 3/14/2023
   Date Recommended by the VRB: 5/25/2023
Sunflower
7PPZE57R (Exp.)

1. 7PPZE57R is a linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross HP2699R/HS8117R. Both HP2699R & HS8117R are Pioneer proprietary lines. Selections were made for oil content, self fertility, acceptable plant stature and high yield, as assessed in hybrid combination.

2. Hybrids utilising 7PPZE57R have been tested in and adapted to the growing regions of Southern Africa and Argentina.

3. 
   Flowering: late
   Height: tall
   Branching Type: present, only apical
   Distal Leaf Shape: broad triangular
   Leaf Attitude: medium
   Leaf Color: light green
   Ray Flowers: medium, narrow ovate, flat, short
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: strongly convex
   Seed Outer Pericarp Color: dark brown
   Stripe Appearance- on margin: strongly expressed, between margin: weakly expressed, white
   Leaf Blistering: weak
   Leaf Serration: fine
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: turned down with straight stem
   Seed Shape: ovoid elongated
   Seed Thickness: thin
   Hypocotyl Anthocyanin: present, weak

   List and describe variants and expected frequency. If none, state “none”. None

4. 7PPZE57R claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2024

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023

Date Recommended by the VRB: 05/25/2023
Sunflower
7PTSM93R (Exp.)

1. 7PTSM93R is a linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross HP2195R-1/SOLF9014RM. Both HP2195R-1 and SOLF9014RM are Pioneer proprietary lines. Selections were made for oil content, self-fertility, acceptable plant stature and high yield, as assessed in hybrid combination.

2. Hybrids utilising 7PTSM93R have been tested in and adapted to the growing regions of Southern Africa and Argentina.

3.  
   Flowering: **very late**
   Height: **tall**
   Branching Type: **present, only apical**
   Distal Leaf Shape: **broad triangular**
   Leaf Attitude: **medium**
   Leaf Color: **medium green**
   Ray Flowers: **medium, narrow ovate, strongly recurved to back of head, medium**
   Disk Flower Color: **orange**
   Pollen Color: **Orange**
   Head Shape: **strongly convex**
   Seed Outer Pericarp Color: **black**
   Stripe Appearance- on margin: **strongly expressed**, between margin: **strongly expressed, white**
   Leaf Blistering: **weak**
   Leaf Serration: **medium**
   Ray Flower Color: **medium yellow**
   Stigma Anthocyanin: **strong, present**
   Pappi Color: **Green**
   Head (neck) Attitude: **turned down with strongly curved stem**
   Seed Shape: **ovoid elongated**
   Seed Thickness: **medium**
   Hypocotyl Anthocyanin: **present, medium**

   List and describe variants and expected frequency. If none, state “none”. **None**

4. 7PTSM93R claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: **2024**

7. Certified seed production acreage can be published by AOSCA and certifying agencies: **No**

8. Will this variety be submitted for protection under the Plant Variety Protection Act? **No**

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? **Yes**

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? **Yes**

   Date this application was submitted: **3/14/2023**
   Date Recommended by the VRB: **05/25/2023**
**Sunflower**  
7PTCC71B (Exp.)

1. 7PTCC71B is a tribenuron-methyl tolerant oleic oil type maintainer line developed by Pioneer Hi-Bred International that derives from the cross 7PTYJ59B / EC1665SLB. 7PTYJ59B & EC1665SLB are all Pioneer proprietary lines. EC1665SLB is a tribenuron-methyl tolerant line used as the donor for herbicide tolerance. Selections were made for tribenuron-methyl tolerance, earlier flowering, shorter plant height, oil content and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PTCC71B have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: very late  
Height: short  
Branching Type: absent  
Distal Leaf Shape: broad triangular  
Leaf Attitude: High  
Leaf Color: medium green  
Ray Flowers: medium, narrow ovate, flat, medium  
Disk Flower Color: Purple  
Pollen Color: Orange  
Head Shape: weakly convex  
Seed Outer Pericarp Color: black  
Stripe Appearance- on margin: weakly expressed, between margin: none or very weakly expressed, grey  
Leaf Blistering: absent or very weak  
Leaf Serration: coarse  
Ray Flower Color: medium yellow  
Stigma Anthocyanin: absent  
Pappi Color: Green  
Head (neck) Attitude: turned down with slightly curved stem  
Seed Shape: ovoid wide  
Seed Thickness: medium  
Hypocotyl Anthocyanin: present, weak

List and describe variants and expected frequency. If none, state “none”. none

4. This variety is tolerant to Sulfonyleurea.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023

Date Recommended by the VRB: 05/25/2023
Sunflower
7PGCU58B (Exp.)

1. 7PGCU58B is a high oleic oil type maintainer line developed by Pioneer Hi-Bred International that derives from the cross PH1015B /H1311LG. PH1015B & H1311LG are all Pioneer proprietary lines. Selections were made for earlier flowering, shorter plant height, oleic content and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PGCU58B have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: very late
   Height: medium
   Branching Type: absent
   Distal Leaf Shape: broad triangular to acuminate
   Leaf Attitude: High
   Leaf Color: dark green
   Ray Flowers: medium, narrow ovate, flat, medium
   Disk Flower Color: Purple
   Pollen Color: Orange
   Head Shape: weakly convex
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: strongly expressed, between margin: weakly expressed, grey
   Leaf Blistering: absent or very weak
   Leaf Serration: medium
   Ray Flower Color: orange yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: turned down with straight stem
   Seed Shape: ovoid wide
   Seed Thickness: thin
   Hypocotyl Anthocyanin: present, strong

List and describe variants and expected frequency. If none, state “none”. None

4. This variety claims no resistance to the common sunflower diseases and insect pests.
5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.
6. Certified seed is expected to first be available in: 2023
7. Certified seed production acreage can be published by AOSCA and certifying agencies: No
8. Will this variety be submitted for protection under the Plant Variety Protection Act? No
9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes
10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower

7PDEB24R (Exp.)

1. 7PDEB24R is a linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross T1170LM*4/F0998LM / T1170LM*4/ T1068LM. All T1170LM, F0998LM & T1068LM are Pioneer proprietary lines. Selections were made for better disease profile, and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PDEB24R have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. 
   Flowering: **very early**
   Height: **short**
   Branching Type: **present, overall**
   Distal Leaf Shape: **broad triangular to acuminate**
   Leaf Attitude: **High**
   Leaf Color: **medium green**
   Ray Flowers: **medium, narrow ovate, flat, medium**
   Disk Flower Color: **orange**
   Pollen Color: **Orange**
   Head Shape: **flat**
   Seed Outer Pericarp Color: **dark brown**
   Stripe Appearance- on margin: **none or very weakly expressed**, between margin: **none or very weakly expressed, brown**
   Leaf Blistering: **weak**
   Leaf Serration: **medium**
   Ray Flower Color: **orange yellow**
   Stigma Anthocyanin: **absent**
   Pappi Color: **Green**
   Head (neck) Attitude: **half-turned down with straight stem**
   Seed Shape: **ovoid elongated**
   Seed Thickness: **medium**
   Hypocotyl Anthocyanin: **present, weak**

   List and describe variants and expected frequency. If none, state “none”. **None**

4. This variety claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: **2023**

7. Certified seed production acreage can be published by AOSCA and certifying agencies: **No**

8. Will this variety be submitted for protection under the Plant Variety Protection Act? **No**

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? **Yes**

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? **Yes**

   Date this application was submitted: **3/14/2023**

   Date Recommended by the VRB: **5/25/2023**
Sunflower
7PLBW09R (Exp.)

1. 7PLBW09R is an imidazolinone tolerant linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross 7PDEB24R / T1170LM*4/ U12FSCLLM. All T1170LM, U12FSCLLM & 7PDEB24R are Pioneer proprietary lines. U12FSCLLM is CLHA + tolerant donor used as the donor for herbicide tolerance. Selections were made for imidazolinone tolerance, oil content and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PLBW09R have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. 
   Flowering: medium
   Height: short
   Branching Type: present, overall
   Distal Leaf Shape: broad triangular to acuminate
   Leaf Attitude: High
   Leaf Color: medium green
   Ray Flowers: medium, broad ovate, flat, medium
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: strongly convex
   Seed Outer Pericarp Color: dark brown
   Stripe Appearance- on margin: none or very weakly expressed, between margin: none or very weakly expressed, brown
   Leaf Blistering: weak
   Leaf Serration: coarse
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green=1
   Head (neck) Attitude: half-turned down with straight stem
   Seed Shape: ovoid elongated
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, medium

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to Imidazoline.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PQCF52R (Exp.)

1. 7PQCF52R is a tribenuron-methyl tolerant linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the backcross 7PFZD07R /4* OPED6722R. 7PFZD07R is Pioneer proprietary lines and OPED6722R was a Agrigenetics DBA Mycogen proprietary line. 7PFZD07R is a tribenuron-methyl tolerant donor line. Selections were made for tribenuron-methyl tolerance and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PQCF52R have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: late
   Height: tall
   Branching Type: present, predominantly apical
   Distal Leaf Shape: narrow triangular to broad triangular
   Leaf Attitude: medium
   Leaf Color: dark green
   Ray Flowers: sparse, fusiform, longitudinal recurved, long
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: flat
   Seed Outer Pericarp Color: dark brown
   Stripe Appearance- on margin: weakly expressed, between margin: weakly expressed, grey
   Leaf Blistering: weak
   Leaf Serration: coarse
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: medium, present
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with straight stem
   Seed Shape: ovoid elongated
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, strong

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety is tolerant to Sulfonylurea.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023

Date Recommended by the VRB: 05/25/2023
Sunflower
7PYDF04R (Exp.)

1. 7PYDF04R is a tribenuron-methyl tolerant linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the backcross 7PMZW93R/4* 7PRWT54R. 7PMZW93R is Pioneer proprietary lines. 7PRWT54R is a tribenuron-methyl tolerant donor line. Selections were made for tribenuron-methyl tolerance, for stripped seed and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PYDF04R have been tested in and are adapted to the growing regions of Central and Eastern, Europe.

3. 
   Flowering: early 
   Height: short 
   Branching Type: present, predominantly apical 
   Distal Leaf Shape: narrow triangular 
   Leaf Attitude: High 
   Leaf Color: dark green 
   Ray Flowers: dense, narrow ovate, flat, short 
   Disk Flower Color: orange 
   Pollen Color: Yellow 
   Head Shape: flat 
   Seed Outer Pericarp Color: grey 
   Stripe Appearance- on margin: strongly expressed, between margin: strongly expressed, white 
   Leaf Blistering: weak 
   Leaf Serration: coarse 
   Ray Flower Color: medium yellow 
   Stigma Anthocyanin: absent 
   Pappi Color: Green 
   Head (neck) Attitude: half-turned down with straight stem 
   Seed Shape: ovoid elongated 
   Seed Thickness: thin 
   Hypocotyl Anthocyanin: present, strong

   List and describe variants and expected frequency. If none, state “none”. none

4. This variety is tolerant to Sulfonyleurea.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023

Date Recommended by the VRB: 05/25/2023
1. 7PRQD08R is a tribenuron-methyl tolerant oleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the backcross T1370SUHM/4* OPED6722R. T1370SUHM is Pioneer proprietary line and OPED6722R was a Agrigenetics DBA Mycogen proprietary line. T1370SUHM is tribenuron-methyl tolerant line used as the donor for herbicide tolerance. Selections were made for tribenuron-methyl tolerance, oleic content and recurrent parent trait, as assessed in hybrid combination.

2. Hybrids utilizing 7PRQD08R have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: **early**
   Height: **medium**
   Branching Type: **present, overall**
   Distal Leaf Shape: **narrow triangular**
   Leaf Attitude: **High**
   Leaf Color: **dark green**
   Ray Flowers: **sparse, narrow ovate, flat, medium**
   Disk Flower Color: **Purple**
   Pollen Color: **Yellow**
   Head Shape: **strongly convex**
   Seed Outer Pericarp Color: **black**
   Stripe Appearance- on margin: **none or very weakly expressed**, between margin: **none or very weakly expressed**, **black**
   Leaf Blistering: **absent or very weak**
   Leaf Serration: **medium**
   Ray Flower Color: **medium yellow**
   Stigma Anthocyanin: **absent**
   Pappi Color: **Green**
   Head (neck) Attitude: **vertical**
   Seed Shape: **ovoid elongated**
   Seed Thickness: **thin**
   Hypocotyl Anthocyanin: **present, medium**

List and describe variants and expected frequency. If none, state “none”. **None**

4. This variety is tolerant to Sulfonylurea.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: **2023**

7. Certified seed production acreage can be published by AOSCA and certifying agencies: **No**

8. Will this variety be submitted for protection under the Plant Variety Protection Act? **No**

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? **Yes**

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? **Yes**

Date this application was submitted: **3/14/2023**

Date Recommended by the VRB: **05/25/2023**
Sunflower
7PGZF74R (Exp.)

1. 7PGZF74R is a linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross 7PKVL42R /7PSHU66R. Both 7PKVL42R & 7PSHU66R are Pioneer proprietary lines. Selections were made for earlier flowering, shorter plant height, oil and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PGZF74R have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: early
   Height: short
   Branching Type: present=9, only apical
   Distal Leaf Shape: broad triangular to acuminate
   Leaf Attitude: High
   Leaf Color: dark green
   Ray Flowers: dense, broad ovate, flat, medium
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: weakly convex
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: strongly expressed, between margin: weakly expressed, grey
   Leaf Blistering: medium
   Leaf Serration: medium
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: turned down with slightly curved stem
   Seed Shape: ovoid elongated
   Seed Thickness: thin
   Hypocotyl Anthocyanin: present, weak

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety claims no resistance to the common sunflower diseases and insect pests

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PLKJ37R (Exp.)

1. 7PLKJ37R is a linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross F1164LM / U14LGCLLM. Both F1164LM & U14LGCLLM are Pioneer proprietary lines. Selections were made for earlier flowering, shorter plant height, oil and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PLKJ37R have been tested and are adapted to the growing regions of the South and Eastern Europe.

3. Flowering: medium
   Height: short
   Branching Type: present, predominantly apical
   Distal Leaf Shape: lanceolate to narrow triangular
   Leaf Attitude: High
   Leaf Color: dark green
   Ray Flowers: sparse, narrow ovate, flat, medium
   Disk Flower Color: orange
   Pollen Color: Orange
   Head Shape: flat
   Seed Outer Pericarp Color: dark brown
   Stripe Appearance- on margin: none or very weakly expressed, between margin: none or very weakly expressed, brown
   Leaf Blistering: weak
   Leaf Serration: fine
   Ray Flower Color: orange yellow
   Stigma Anthocyanin: weak, present
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with straight stem
   Seed Shape: ovoid elongated
   Seed Thickness: thin
   Hypocotyl Anthocyanin: present, strong

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PHBJ77R (Exp.)

1. 7PHBJ77R is an oleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross 7PBCH82R/EC1674NLR. Both 7PBCH82R & EC1674NLR are Pioneer proprietary lines. Selections were made for earlier flowering, shorter plant height, oleic content and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PHBJ77R have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. Flowering: early
   Height: short
   Branching Type: present, overall
   Distal Leaf Shape: narrow triangular to broad triangular
   Leaf Attitude: low
   Leaf Color: medium green
   Ray Flowers: dense, broad ovate, flat, long
   Disk Flower Color: orange
   Pollen Color: Yellow
   Head Shape: flat
   Seed Outer Pericarp Color: medium brown
   Stripe Appearance- on margin: none or very weakly expressed, between margin: none or very weakly expressed, brown
   Leaf Blistering: medium
   Leaf Serration: medium
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: weak, present
   Pappi Color: Green
   Head (neck) Attitude: vertical
   Seed Shape: elongated
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, strong

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety claims no resistance to the common sunflower diseases and insect pests.

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023
Date Recommended by the VRB: 5/25/2023
Sunflower
7PEAJ78R (Exp.)

1. 7PEAJ78R is a linoleic oil type restorer line developed by Pioneer Hi-Bred International that derives from the cross 7PPDR59R/T0866LM. Both 7PPDR59R & T0866LM are Pioneer proprietary lines. Selections were made for earlier flowering, shorter plant height, oil and yield, as assessed in hybrid combination.

2. Hybrids utilizing 7PEAJ78R have been tested in and are adapted to the growing regions of Central, Eastern, and Western Europe.

3. 
   Flowering: early
   Height: short
   Branching Type: present, predominantly apical
   Distal Leaf Shape: broad triangular to acuminate
   Leaf Attitude: High
   Leaf Color: medium green
   Ray Flowers: medium, narrow ovate, flat, long
   Disk Flower Color: orange
   Pollen Color: Yellow
   Head Shape: weakly concave
   Seed Outer Pericarp Color: black
   Stripe Appearance- on margin: strongly expressed, between margin: weakly expressed, grey
   Leaf Blistering: medium
   Leaf Serration: medium
   Ray Flower Color: medium yellow
   Stigma Anthocyanin: absent
   Pappi Color: Green
   Head (neck) Attitude: half-turned down with straight stem
   Seed Shape: ovoid wide
   Seed Thickness: medium
   Hypocotyl Anthocyanin: present, weak

   List and describe variants and expected frequency. If none, state “none”. None

4. This variety claims no resistance to the common sunflower diseases and insect pests

5. Pioneer Hi-Bred International will be responsible for the maintenance of all seed stocks. Foundation seed will be produced in open pollinated field increases in isolation as prescribed by the state where the seed is grown. A maximum of two generations beyond breeder seed will be allowed. Breeder seed will originate from cage isolations or, on occasion, from controlled bagging in nursery rows.

6. Certified seed is expected to first be available in: 2023

7. Certified seed production acreage can be published by AOSCA and certifying agencies: No

8. Will this variety be submitted for protection under the Plant Variety Protection Act? No

9. Will Title V certification option be requested (to be sold by variety name only as a class of certified seed)? Yes

10. Do you give AOSCA permission to provide descriptive information about this variety to the PVP Office? Yes

Date this application was submitted: 3/14/2023

Date Recommended by the VRB: 5/25/2023