Sunflower

Variety Name: KHE0416R
Experimental Designation:

1. Origin & Breeding History: KHE0416R is a high oleic, tribenuron-methyl tolerant, oilseed restorer line developed by the pedigree method of selection from the cross KHM5110R/KHE7030R. KHM5110R is a proprietary oilseed, restorer with preferred agronomic characteristics. KHE7030R is a proprietary line with preferred agronomic characteristics, that has also been previously approved by the NVRB.

   The pedigree method of selection was used for the development of KHE0416R. It is a bulk of F7 plants tracing back to a single F6 plant. Selection was based on uniform plant type, self compatibility, seed size, seed color, and tolerance to tribenuron-methyl herbicide.

2. Areas of Probably Adaptation: Hybrids utilizing KHE0416R are adapted to sunflower growing regions of North America, and EU. The hybrids will be primarily for vegatable oil.

3.1	Flowering	Medium 5		
3.2	Height (relatively short, medium or tall?):	Tall 7		
3.3	Branching Type:	Predominantly Apical 4		
3.4	Distal Leaf Shape:	Narrow Triangular 3	3.14 Leaf Serration:	Fine 3
3.5	Leaf Attitude:	Low 3	3.15 Leaf Blistering:	Medium 5
3.6	Leaf Color:	Dark Green 7	3.16 Ray Flower Color:	Medium Yellow 3
3.7	Ray Flowers:	Dense 7, Broad Ovate 3, Longitudinal Recurved 2, Medium 5	3.17 Stigma Anthocyanin:	Absent 1
			3.18 Pappi Color:	Green 1
3.8	Disk Flower Color:	Select One	3.19 Head (neck) Attitude:	half-turned down with curved stem 5
3.9	Pollen Color:	Yellow 2	3.20 Seed Shape:	Rounded 4
3.10	Head Shape:	Weakly Convex 4	3.21 Seed Thickness:	Medium 5
3.11	Seed Outer Pericarp Color:	Black 7	3.22 Hypocotyl Anthocyanin:	Absent 1, Select One
3.12	Stripe Appearance:	On margin: None or very weakly expressed 1, between margin: None or very weakly expressed 1, Black 4		

3.13 State expected variants or other varietal information not described above (if none, state "none"). None.

4. Disease & Insect Resistance. KHE0416R is tolerant to tribenuron-methyl herbicide.

5. Procedures for Maintaining Seed Stock: 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 breeders 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 Certified Seed Availability & Publication of Certified Seed Production. 2024, do not publish certified production acreage.

7. PVP Information. No plan for PVP at this time. Do not provide information to the PVP database.

Date this application was submitted: 10/15/2024 Date recommended by the VRB: _____