# Alfalfa & Misc. Legumes Variety Description Summary Page

Date recommended by AOSCA: 01-21-2026

| General Varietal Information | |
|---|---|
| Variety Name: 54HG27 | Experimental Designation: 21WH42CC |

**1. Origin & Breeding History**

54HG27 is a synthetic variety developed by DLF USA with 200 parent plants selected for resistance to Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), and Anthracnose. Parent plants were selected from crosses between selections of various DLF USA populations that were developed by phenotypic selection for high forage dry matter yield, high forage quality, persistence, and for resistance to one or more of the following pests: Bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), Anthracnose (race 1), and Leptosphaerulina leaf spot. Parentage of 54HG27 traces 100% to miscellaneous DLF USA breeding populations. Breeder seed was produced under cage isolation near Connell, WA in 2021. Seed was bulk harvested from all parent plants as Synthetic generation 1.

**2. Areas of Probable Adaptation**

Probable primary usage of this variety:

Hay, haylage, greenchop, dehydration

States and/or provinces and countries where this variety has been tested for forage yield, winterhardiness, and/or persistence:

Minnesota and Wisconsin

Areas of adaptation:

North Central area of the U.S

Areas of intended culture:

North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S.

**3. Agronomic and Botanical Characteristics**

Flower color at full bloom:

Syn. generation observed 1

| 85 %Purple | Trace %Cream | 5 %Yellow | 9 % Variegated | Trace % White |
|---|---|---|---|---|

54HG27 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.1 generation is approximately 85% purple, 5% yellow, 9% variegated, and a trace of cream, and white.

54HG27 has high resistance to Anthracnose (race 1), Aphanomyces root rot (race 1), Aphanomyces root rot (race 2), Bacterial wilt, Fusarium wilt, Phytophthora root rot, and Verticillium wilt. It has resistance to Spotted alfalfa aphid and Stem Nematode. Reaction to Pea aphid, Blue Alfalfa aphid, and Root knot nematode has not been tested.

**4. Procedures for Maintaining Seed Stock**

Seed increase of 54HG27 is on a limited generation basis with two generations of breeder, three generations of foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2, Syn.3 or Syn.4), and certified (Syn.3, Syn.4 or Syn.5) classes will be recognized. Production of Syn.2 breeder, Syn.3 foundation or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Connell, Washington in 2021. Sufficient foundation seed for the projected life of the variety will be maintained by DLF USA. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

**7. Certified Seed Availability & Publication of Certified Seed Production**

Certified seed of 54HG27 will be available in 2026. Certified acreage may not be published by AOSCA or member agencies.

| Generations Allowed | Length of Stand Limitation |
|---|---|
| Foundation: Syn.2, Syn.3 or Syn.4 | Foundation: 3 |
| Registered: N/A | Registered: N/A |
| Certified: Syn.3, Syn.4 or Syn.5 | Certified: 6 |

**8. PVP Information**

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| Will PVP be applied for? | Undecided |
| Should seed only be sold by variety name and be certified (Title V)? | No |
| Can AOSCA proide descriptive information to the PVP database? | Yes |