Alfalfa Variety Description Summary Page

Date Recommended by AOSCA: 3-3-2025

General Varietal Information

Variety Name: 54Q30 **Experimental Designation:** 20WH62AY

Origin and Breeding History

54Q30 is a synthetic variety developed by DLF USA with 160 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 54Q30 traces 100% to miscellaneous DLF USA breeding populations. Breeder seed was produced under cage isolation near Connell, WA in 2020. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaption

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.

Agronomic and Botanical Characteristics

Syn. generation observed 1

90 **%Purple** Trace **%Cream** Trace **%Yellow** 2 **% Variegated** 7 **% White**

54Q30 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 90% purple, 7% variegated, 2% Yellow and a trace of cream, and white.

54Q30 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 moderate resistance to Stem nematode. Reaction to Blue Alfalfa aphid, Pea aphid Spotted alfalfa aphid, and Root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of 54Q30 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 2020. 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.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of 54Q30 will be available in 2025. Certified acreage may not be published by AOSCA or member agencies.

Generations Allowed – Mark All That Apply	Length of Stand Limitation
Foundation: Syn.2, Syn.3 or Syn.4	Foundation: 3
Registered:	Registered:
Certified: Syn.3, Syn.4, or Syn.5	Certified: 6

PVP Information

State whether application will be submitted for protection under the Plant Variety Protection Act and if so, whether or not the Title V certification option will be requested (to be sold by variety name only as a class of certified seed).
No decision has been made regarding Plant Variety Protection.

As a means of enhancing varietal protection, state whether or not AOSCA may provide descriptive information about this variety to the PVP office.
This information can be forwarded to the PVP
office.