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## **40+ YEAR QUEST YIELDS NEW PERSISTENT ORCHARDGRASS**

### **Where it all began:**

The breeding history behind Persist is very interesting and explains why so many are excited about its release and availability. The quest to develop a more persistent orchardgrass began all the way back in 1959...nearly 50 years ago! You see, a major plant collection took place from 1959-1961 throughout the state of Tennessee. But this was no ordinary collection. This collection was composed of seed from plants in 6-year or older orchardgrass stands (*Fribourg and Burns, 1961*). Seeds were collected from 97 ecotypes (strains) in 45 Tennessee counties! Each of these strains was then replicated twice and planted at three University of Tennessee experiment sites.

### **Severe treatment:**

After the first year establishment, the plants were subjected to a severe treatment of clipping or grazing to a height of about 1", 3-4 times during the spring and summer. This pressure continued for four years. No fertilization was applied during any of this time. After the four years, individual surviving plants were selected from each of the three locations and multiplied out.

### **Halfway there:**

In September of 1976, Dr. Bob Conger, the new leader of the U of TN's forage breeding and genetics program identified 42 plants that would be selected and cloned for further propagation. Ten replications of each clone were established at Knoxville, TN. Further comparisons and evaluations were made and then the six most outstanding clones were chosen to be what was then called "Syn-2" and eventually named Persist.

After being "established as a variety" the real testing began. Some seed was sent to Jimmy Henning at the University of Kentucky. Other seed was used in Tennessee for some very important trial work. The findings of these trials proved to be very exciting for researchers and other observers as they learned how special Persist is compared to other orchardgrasses.

### **Ready for release:**

In 2000, forty years after the quest began, the University of Tennessee released and licensed Persist exclusively to Smith Seed Services of Halsey, OR, (888-550-2930/www.smithseed.com). Since then Smith Seed Services has continued to increase production and now sells Persist both domestically and internationally.

On September 20, 2007 Persist was awarded a PVP certificate. Dr. Conger, now retired from the University of Tennessee recalls Persist as "the capstone" of his career.

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### ***About the Breeder***

*Dr. Conger received his B.S. from Colorado State University in 1963 and his Ph.D. from Washington State University in 1967. He retired from the University of Tennessee after 35 years service at the end of 2002 with the title of Austin Distinguished Professor. He is author or coauthor of 273 refereed journal articles, book chapters, contributions to national and international symposia and congresses, and abstracts. He is Fellow of ASA, CSSA, and AAAS. He was the editor of Critical Reviews in Plant Sciences from 1981-2003. He developed and released 'Embryogen P' orchardgrass in 1991. This model system for studying embryogenesis in higher plants was used on his two space shuttle experiments in 1994 and 1998.*

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