



A century of clover breeding

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Early History

In 1919, Sir George Stapledon founded the Welsh Plant Breeding Station, appointing R.D. Williams as clover breeder. Williams' early studies on clover genetics and reproduction laid the foundations that herbage legume breeding at IBERS still follow today. The population improvement programmes he instigated resulted in the development of a number of key plant varieties including the white clover varieties S100 and S184, and the red clover varieties S123 and S151. S184, bred in 1936, remains on the recommended lists for Scotland, England and Wales 83 years later.

1940s to 1950s

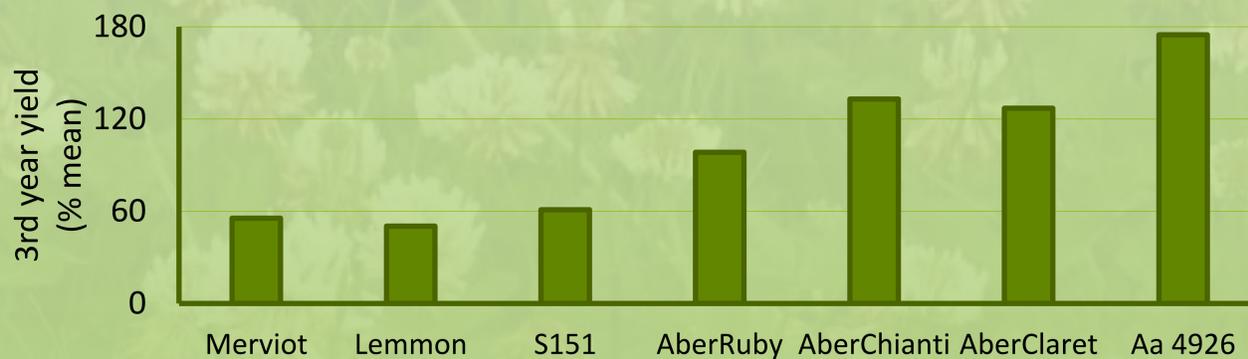
The outbreak of World War II saw Williams was seconded to the Carmarthenshire War Agricultural Executive. This left little time for him to devote to breeding, and he died suddenly in 1943. He was replaced in 1944 by Watkin Williams and subsequently Ellis Davies in 1950. The problem of seed authentication in this time led to the development of "Nomark" strains of S100 and S123 which helped distinguish the lines from inferior strains.

1960s to 1970s

Following the introduction of the NIAB recommended list for grass and clover in 1969, efforts to produce new varieties were increased with the introduction of the white clover varieties Sabeda, Olwen, Donna, Menna, Alice and Siwan, all mainstays of the early years of the recommended list, with Alice still recommended today. Red clover varieties introduced at this time included Sabtoron and the tetraploid varieties Norseman and Astra. Ian Rhodes replaced Ellis Davis as head of the clover breeding group in 1984.

1980s to 1990s

In 1989, a partnership was formed between IGER and Germinal Holdings. The focus of the breeding programmes continued to be the production of high quality white clover varieties with AberHerald, AberDai and AberAce being early examples released under that partnership, with AberSwan newly recommended in 2018. Breeding of red clover, which had been halted in the mid-1980s, was restarted by Terry Michaelson-Yeates in 1998 after having been discontinued in the mid 1980s, with the focus increasingly on extended persistency, the varieties AberClaret and AberChianti being marketed as "five year clovers".



Today

Under the leadership of Mike Abberton from 2000, Athole Marshall from 2012 and Leif Skøt from 2017, innovation has been central to today's breeding programmes. A major breakthrough was made in the development of the variety AberLasting, the first white clover-Caucasian clover hybrid. This variety, combining the best qualities of both parent species, is able to persist in environments that are too harsh for conventional clovers and has been an enormous success, now being sold in four continents. Further innovations include the breeding of Sclerotinia resistant red clovers, the development of grazing tolerant stoloniferous red clovers and the sequencing of the red clover genome.

