

# HIGHLIGHTS FROM 100 YEARS OF OAT BREEDING



IBERS

Sefydliad y Gwyddorau Biolegol, Amgylcheddol a Gwledig  
Institute of Biological, Environmental and Rural Sciences



- First selections of oats, based at Penglais farm in Aberystwyth
- Foundation of Welsh Plant Breeding Station at Aberystwyth University

1919

- First new spring oat varieties released for a range of soil fertility

1920

- First crosses made

- **S172** winter oat with high yield and very short straw: Europe's first semi-dwarf cereal
- Oat breeding suspended due to World War II, resumed in 1946

1930

- **S147** – breakthrough winter oat variety to combine moderate height, high yielding, quality grain spring oat with winter hardiness from Grey winter land race

1938

1939

- **Peniarth** released – Market leader in UK and France

1956

- NIAB Variety Cup awarded to winter oat Powys
- WPBS moved to Gogerddan site

1964

- Start of long term marketing partnership with Semundo (now Senova)

1982

- **Rhiannon** first naked (huskless) oat
- Naked oats shown to have higher nutritional value than any other cereal

1987

- BBSRC Institute of Grassland and Environmental Research formed incorporating WPBS

1990

- Bullion Spring naked oat added to NL

1993

- **Gerald**, still popular with growers today added to RL

1995

- NIAB Variety Cup awarded for winter oat **Gerald**
- First dwarf oats added to the NL – **Hendon** (naked), **Buffalo** (husked)
- First molecular markers identified for use in precision breeding

1996

- **Grafton** winter naked oat released

1997

- Approval of health claim for oat beta-glucan and reduction in Coronary Heart Disease in USA

2001

- 2009- 2014: QUOATS Harnessing new technologies for sustainable oat production and utilisation  
Funding: BBSRC, DEFRA, Scottish Government, Welsh Government, AHDB plus industry partners

2004

- Approval of health claim in the UK on oats and reduction of blood cholesterol
- **Mascani**, the UK's most popular milling oat with its consistent grain quality added to the RL
- 2004- 2009 Defra-LINK project Oatlink: The incorporation of important traits underlying sustainable development of the oat crop through combining 'conventional' phenotypic selection with molecular marker technologies.  
Funding: Defra, SEERAD, AHDB plus industry partners.

2009

- **Balado** a high yielding dwarf husked oat added to RL

2010

- 2014- 2019 BBSRC-LINK project InnovOat: Developing enhanced breeding methodologies for oats for human health and nutrition with industry partners BOBMA and Senova and additional funding from AHDB

2011

- **Conway** a high quality spring oat added to RL

2012

- Queen's award for plant breeding

2014

- **Peloton** a early high yielding winter naked oat added to RL

2017

- Winter husked oat **Galloway**, a novel feed oat with low lignin husk. RL candidate 2019
- Winter husked oat **Penrose**, a milling oat RL candidate 2019

2019

The future – oats for new markets, forage, milling, feed