



ARTONIS

Perennial Ryegrass (4n)

Lolium perenne L.

Unique combination of yield and quality

Things to know

As can be seen from its name, Artonis belongs to the "AR"-type, i.e. very early maturing group of perennial ryegrass. Heading date is 2 days later than for Arvicola, by which it is the latest maturing variety of the "AR"-group. Artonis is based on Swiss ecotype populations that have been collected in 1991 at higher altitudes (1000 m.a.s.l.) and that have been transformed to the tetraploid state in 1999 by a colchicine treatment. In the official trials from 2014 to 2016 convinced by best results in yield as well as in digestibility. Therefore, Artonis is the new standard to beat in the early maturing group.

Descent

Base material

Selection within tetraploid Agroscope breeding material based on a colchicine treatment of ecotypes collected from high altitudes (1'000 m.a.s.l.)

M0 seed

Row trial 2007 (LP0795) with seed harvest on 6 half-sib families from a polycross with 6 clones.

Literature

Suter D., Frick R., Hirschi H.-U., 2023. Sortenprüfung Englisches Raigras: Sechs Neuzüchtungen nehmen die agronomische Hürde. Agrarforschung Schweiz 14(1), 122-129

Kempf K., Schubiger F.-X., Tanner P., Grieder C., 2020. Mehr Gene, mehr Leistung: die neuen Englisch-Raigras-Sorten von Agroscope. Agrarforschung Schweiz 11(1), 1-8

National listing

Situation in Switzerland

On the Swiss List of Recommended Varieties of Forage Plants since 2017

Further registered in the following countries

DEU, LUX

Agronomic characteristics

Results of the official Swiss variety trials 2020-2022 (Suter et al. 2023) (4n, früh-mittelfrüh)

	ARTONIS	Mean
Yield	2.9	4.2
General impression	2.5	2.6
Juvenile growth	2.4	2.1
Competing ability	4.3	4.3
Persistence	2.6	2.9
Resistance to winter conditions	3.3	3.3
Resistance to leafspots and rust	3.0	3.6
Digestibility of the organic matter	3.0	3.3
Persistence at higher altitudes	1.9	2.2
Index (weighted average of all notes)	2.9	3.2

Scoring scale 1 = very good; 5 = medium; 9 = very poor
 Yield Mean of 4 experimental sites over 2 years
 Mean Mean value of standard varieties

Description according to UPOV guidelines

DUS test conducted at Scharnhorst, BSA (DEU), 2014-2015

UPOV No	Characteristics	State of expression	Note
1	Ploidy	tetraploid	4
5	Leaf: intensity of green color	medium to dark	6
7	Plant: vegetative growth habit (without vernalization)	semi-erect to intermediate	4
10	Plant: tendency to form inflorescences (without vernalization)	weak	3
11	Time of inflorescence emergence (after vernalization)	very early to early	2
14	Flag leaf: length	medium to long	6
15	Flag leaf: width	broad to very broad	8

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