



Wheat

2023/24

Seeds for your success



vision>>blue®

Seeds from Strube are of excellent quality and ensure highest yields. Strube provides high-performing, healthy varieties that fully meet your needs and requirements. For sustainable, economic success. **VisionBlue® – conserving resources, securing the future.**



strube.net/visionblue

strube
The Seed. Est. 1877

VisionBlue® – our way of shaping the agriculture

Green Deal, fertilizer regulation, stricter requirements for plant protection – agriculture is facing enormous challenges. Many things that have been taken for granted for decades are being put to the test. Farmers must adapt many processes to cope with these changes. Food should at the same time be of high quality and produced in a sustainable and environmentally friendly way. This is a balancing act for which all parties involved must act flexibly.

Conserving resources, securing the future

We would like to accompany you along the way to the future. Our **VisionBlue®** corporate strategy brings together all projects dedicated to the transformation towards more sustainability, resource conservation and improved climate resilience. This includes Strube as a company, as well as our breeding strategies and production methods – to ensure that you can secure success with our products, even under the challenging conditions facing agriculture.

Tomorrow's varieties are today's plant breeding work

We make the most difference by doing what we are good at: the breeding of healthy, climate robust varieties. As present and future orientated breeders, we draw on a broad genetic base for this purpose. We use novel, biotechnological analysis and diagnostic methods to accelerate the breeding process. For example, one technology platform further developed by Strube is "genomic selection".



Dr Mario Gils

Head of Wheat Breeding at Strube Research

each of these growing situations, now and in the future. We are laying the foundation for this successful future day by day today.



Selected breeding targets

Yield

Quality

Protein content
Falling number

Resistance/Tolerance

Powdery mildew
Leaf septoria
DTR
Yellow rust
Brown rust
Ear fusarium

Other characteristics

Winter hardiness
Maturity
Resistance to lodging

With this method, we can predict certain characteristics of our crosses long before their phenotypic expression in the adult plant. Future-proof varieties must deliver consistently high performance under difficult conditions – be it through improved nutrient utilisation or high resistance to biotic and abiotic stress. Our new registrations **cayenne** and **absint** meet these requirements perfectly. Read more on page 5.

Reliable alliance

As a plant breeder and seed specialist, we permanently commit ourselves to ensure that our wheat breeding program can respond to the continuously changing market demands. We currently market wheat in over 20 countries with a wide range of requirements for the product. We provide high-performance varieties for

Winter Wheat

Premium quality bread wheat

Winter Wheat

Bread wheat

Winter wheat

moschus

Premium quality bread wheat (E)

- Your guarantee for the best quality with top scores in protein, falling number and sedimentation
- Extremely healthy from leaf to ear
- Winter hard and good lodging resistance

Yield	untreated	medium
	treated	medium
Protein content	very high	
Falling number	very high	
Zeleny value	very high	
Lodging	low	
Maturity	medium	
Mildew	low–very low	
Ear fusarium	low	

Distribution partner:



Untreated seed available for organic farming

Winter wheat

ponticus

Premium quality bread wheat (E)

- Safe to grow: high lodging resistance and good winter hardiness
- Safe commercialisation quality: high and stable falling number and a very high protein content
- Outstanding nitrogen efficiency

Yield	untreated	medium–high
	treated	medium
Protein content	high–very high	
Falling number	very high	
Lodging	very low	
Maturity	medium	
Mildew	very low	
Yellow rust	very low	

Distribution partner:



Our recommendation

Our two new varieties **cayenne** (A) and **absint** (A) impress with their unique combination of characteristics: High-yielding, N-efficient, and resistant to ear fusarium and lodging – both varieties are ideally equipped for the requirements in the field.

New!

Winter wheat

cayenne

Bread wheat (A)

- Unique quality combination of falling number (8) and water absorption (9)
- Outstanding leaf and ear health
- Extra benefit: PCH1 = Resistant against Pseudocercospora (Eyespot)

Yield	untreated	medium–high
	treated	high
Protein content	medium–high	
Falling number	high	
Lodging	medium–low	
Maturity	medium–late	
Yellow rust	very low	

Distribution partner:



New!

Winter wheat

absint

Bread wheat (A)

- Ear healthy wheat with A quality
- Short growth and best lodging resistance
- Nitrogen efficiency with reliable marketing quality

Ertrag	untreated	medium–high
	treated	medium–high
Protein content	medium–high	
Falling number	very high	
Lodging	low	
Maturity	medium	
Fusarium	low–medium	

Distribution partner:



Winter Wheat

Bread wheat

Winter Wheat

Milling wheat

New!

Winter wheat
pallas
Bread Wheat (A)

- Winterhard wheat with PCH1 resistance
- Good fusarium resistance, suitable in maize rotations
- Good baking properties with high protein

Yield	untreated	high
	treated	high
Protein content		medium–high
Falling number		high–very high
Mildew		low
Yellow rust		low

Distribution partner:



Winter wheat
salasar
Bread Wheat (A)

- High falling number and protein level
- Short, robust density-type with good straw stability
- Universal fitting in all crop rotations

Yield	untreated	high
	treated	high
Protein content		medium–high
Falling number		medium–high
Lodging		medium–low
Fusarium		medium–low
Yellow rust		low–very low

Distribution partner:



New!

Winter wheat
arevus
Milling wheat (B)

- Winterhard and healthy wheat from root to flag leaf
- Outstanding high TGW
- Fungicide savings due to good leaf health
- Extra benefit: PCH1 = Resistant against Pseudocercospora (Eyespot)

Yield	untreated	high–very high
	treated	high
Protein content		medium–low
Falling number		high
Lodging		medium–low
Mildew		low–very low
Yellow rust		low–very low

Distribution partner:



New!

Winter wheat
vagabund
Milling wheat (B)

- High yielding winter wheat variety with nice agronomical characteristics and a good diseases tolerance package
- High falling number and good protein level
- Extra benefit: PCH1 = Resistant against Pseudocercospora (Eyespot)

Yield	untreated	high
	treated	high
Protein content		medium–low
Falling number		high–very high
Lodging		low
Yellow rust		low–very low
Mildew		low–very low

Distribution partner:



Winter Wheat

Overview: Properties of our winter wheat varieties

		Premium quality bread wheat (E)		Bread wheat (A)				Milling wheat (B)	
		moschus	ponticus	absint	cayenne	pallas	salasar	arevus	vagabund
Yield	Registration	2016	2015	2022	2022	2022	2017	2021	2022
	Yield untreated	0	0	+	+	++	++	+++	++
	Yield treated	0	0	+	++	++	++	++	++
Quality	Falling number	++++	++++	++++	+++	+++	+	++	++
	Falling number stability	+	+	+	+	+	+	+	+
	Protein content	++++	+++	0	0	+	+	-	-
	Zeleny value	++++	++++	++	++	+	0	+	0
	Loaf volume	+++	+++	++	++	++	+	+	+
Agronomy	Maturity	medium	medium	medium	medium-late	medium	medium	medium-late	medium-late
	Plant height	medium	short-medium	short	medium	medium	short	medium	medium
	Winter kill	+*	+	+*	+*	+	+*	+	+*
	Lodging	++	+++	++	+	0	+	+	++
Resistance	Fusarium	++	0	+	+	+	+	0	0
	Yellow rust	+++	++	++	+++	++	+++	+++	+++
	Brown rust	+	+	+	+	0	0	++	+
	Pseudocercospora / Eye spot	0	-	0	+	+	---	++	+
	Septoria tritici	+	0	0	0	+	+	++	0
	Mildew	+++	+++	++	+++	++	++	+++	+++
	DTR / Tan spot	+	+	+	0	0	0	+	+

* breeder's classification

Scale for yield and quality
++++ = very high; +++ = high-very high; ++ = high; + = medium-high;
0 = medium; - = medium-low; -- = low; --- = low-very low; ---- = very low

Scale for winter kill, lodging and susceptibility for diseases
++++ = not documented or very low; +++ = low-very low; ++ = low; + = medium-low;
0 = medium; - = medium-high; -- = high; --- = high-very high; ---- = very high

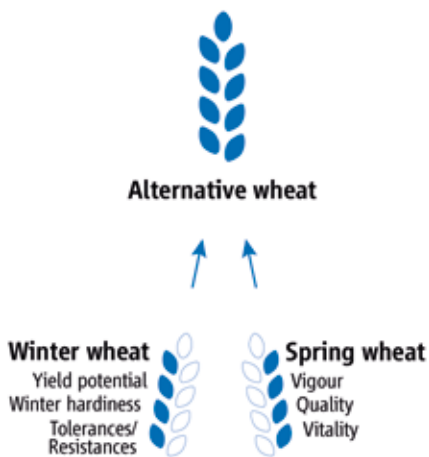
Alternative Wheat WeW® –
No vernalisation, good winter hardiness

When the weather conditions are not optimal or the previous crop is harvested late, it may get too late for sowing winter wheat. Here, Strube **alternative wheat** is the solution due to its exceptionally wide sowing window.

Alternative wheat combines the winter hardiness and the yield potential of winter wheat while keeping the high quality and vigour of spring wheat. This combination allows flexible sowing dates since **alternative wheat** does not require vernalisation. The sowing window is very generous from the end of October to mid-April.

When sown in autumn, its frost tolerance allows a clear developmental advantage compared to spring wheat.

The later sowing is carried out in the autumn, the higher the yield advantage over winter wheat varieties of comparable quality. This was confirmed



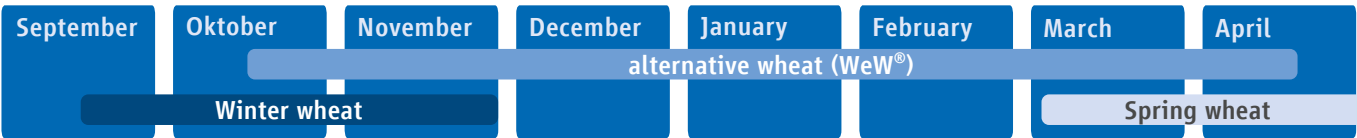
med in official and independent trials carried out by the German Bundessortenamt.

WeW® is a registered trademark for Strube’s “Wechselweizen” (alternative wheat) developed with our own special breeding scheme.

Your Benefits:

- Cultivating an economically interesting crop even after late harvested leaf crops
- Very flexible sowing, from end of October to late spring
- Maximum sowing flexibility makes it possible to wait for optimal weather conditions
- Alternative Wheat is offered exclusively in the higher quality classes (quality wheat, elite wheat), thus providing optimum marketing opportunities

The broad sowing window of alternative wheat



Alternative Wheat



- Predestined for late autumn cultivation, with excellent baking quality
- Very resistant to yellow and brown rust
- Short straw and good lodging resistance

Yield	untreated	medium–high
	treated	medium–low
	late autumn cultivation	high
Protein content		very high
Falling number		high–very high
Zeleny value		very high
Lodging		low
Maturity		medium
Yellow rust		low–very low
Brown rust		low–very low

Distribution partner:



- High and stable yields: predestined for late autumn cultivation
- A-quality with the best processing properties
- mildew resistant and extremely stable

Yield	untreated	medium
	treated	medium
	late autumn cultivation	high
Protein content		high–very high
Falling number		high
Zeleny value		very high
Lodging		medium–low
Maturity		medium
Mildew		low–very low

Distribution partners:



in GB



other countries

Overview: Properties of our alternative wheat varieties

***Breeder's classification**

Scale for yield and quality
++++ = very high; +++ = high-very high; ++ = high; + = medium-high; 0 = medium; - = medium-low; -- = low; --- = low-very low; ---- = very low

Scale for winter kill, lodging and susceptibility for diseases
++++ = not documented or very low; +++ = low-very low; ++ = low; + = medium-low; 0 = medium; - = medium-high; -- = high; --- = high-very high; ---- = very high

		lennox	su_alvius
Yield	Registration	2014	2019
	Yield untreated	0	0
	Yield treated	-	0
Quality	Falling number	+++	++
	Stability	++	+
	Protein content	++++	+++
	Zeleny value	++++	++++
	Loaf volume	+++	+
Agronomy	Maturity	medium	medium
	Plant height	short	short-medium
	Winter kill*	++	0*
	Lodging	++	+
Resistance	Fusarium	-	0
	Yellow rust	+++	+
	Brown rust	+++	+
	Septoria tritici	0	0
	Mildew	-	+++

Spring Wheat

Premium quality bread wheat (E)



- E-quality spring wheat with top yield at the level of the best A-varieties
- Medium maturity with good stability
- Resistant against orange blossom midge

Yield	untreated	high
	treated	high
Protein content		high
Falling number		very high
Loaf volume		high-very high
Lodging		low
Plant height		short-medium
Yellow rust		medium
Maturity		medium

Distribution partner:



- Outstanding combination of high yield with the highest protein content
- Resistant against orange blossom midge
- Best N-efficiency of all spring wheat varieties with safe high market performance

Yield	untreated	medium
	treated	medium
Protein content		very high
Falling number		high-very high
Loaf volume		high-very high
Lodging		low
Plant height		short-medium
Yellow rust		low
Maturity		medium

Distribution partner:



Spring Wheat

bread wheat (A)

Spring Wheat

Spring wheat

servus

Bread wheat (A)

- Spring wheat with high yield in both tested intensities
- Short growth with excellent stability
- Good mildew- and yellow rust tolerance

Yield	untreated	high
	treated	high
Protein content		high
Falling number		high–very high
Zeleny value		very high
Lodging		low
Maturity		medium
Yellow rust		low
Mildew		very low

Distribution partners:



Spring wheat

sibelius

Bread wheat (A)

- Medium maturity with short plant height and high lodging tolerance
- Very good overall health, with remarkable yellow rust resistance
- Very good baking quality

Yield	untreated	high
	treated	high
Protein content		high–very high
Falling number		high
Zeleny value		high–very high
Lodging		low
Maturity		medium
Yellow rust		very low
Mildew		low

Distribution partners:



Spring wheat

thorus

Bread wheat (A)

- High yielding spring wheat
- Good resistance package and high straw stability
- Characteristical big ear with a good grain weight

Yield	untreated	high
	treated	high
Protein content		medium
Falling number		high
Zeleny value		very high
Lodging		low
Maturity		medium
Yellow rust		low
Mildew		low

Distribution partner:



Overview: Properties of our spring wheat varieties

		Premium quality bread wheat (E)		Bread wheat (A)		
		su_ahab	su_tarrafal	servus	sibelius	thorus
Yield	Registration	2019	2019	2016	2017	2017
	Yield untreated	+	0	+	+	+
	Yield treated	+	0	+	+	+
Quality	Falling number	+++	+++	+++	++	++
	Falling number stability	+	+	+	+	+
	Protein content	++	++++	++	+++	0
	Zeleny value	++++	++++	++++	+++	++++
	Loaf volume	+++	+++	+	++	+++
Agronomy	Maturity	medium	medium	medium	medium	medium
	Plant height	short–medium	short–medium	short	short–medium	short–medium
	Lodging	++	++	++	++	++
Resistance	Fusarium	0	+	-	-	0
	Yellow rust	0	++	++	+++	+
	Brown rust	0	+	-	++	+
	Septoria tritici	0	+	+	0	0
	Mildew	0	--	+++	++	+

*breeder's classification

Scale for yield and quality
++++ = very high; +++ = high–very high; ++ = high; + = medium–high; 0 = medium; - = medium–low; -- = low; --- = low–very low; ---- = very low

Scale for winter kill, lodging and susceptibility for diseases
++++ = not documented or very low; +++ = low–very low; ++ = low; + = medium–low; 0 = medium; - = medium–high; -- = high; --- = high–very high; ---- = very high

Please contact us for more information



Uwe Diebel
Sales Manager Wheat
Hauptstraße 1 | 38387 Söllingen
M +49 (0) 160 96 94 97 21
u.diebel@strube.net



Eva Maria Schulze Bisping
Product Manager Wheat
Hauptstraße 1 | 38387 Söllingen
T +49 (0) 53 54 809 - 621
e.schulze-bisping@strube.net



Saaten-Union GmbH
Eisenstraße 12
DE 30916 Isernhagen HB
T +49 (0) 5 11 7 26 66 - 0
info@saaten-union.de
saaten-union.de



R.A.G.T. Saaten
Deutschland GmbH
Untere Wiesenstraße 7
DE 32120 Hiddenhausen
T +49 (0) 52 21 7 65 20
info@ragt.de
ragt.de



Hauptsaaen
für die Rheinprovinz GmbH
Altenberger Straße 1 a
DE 50668 Köln
T +49 (0) 2 21 16 38 - 2 00
info@hauptsaaen.de
hauptsaaen.de



I.G. Pflanzenzucht GmbH
Reichenbachstraße 1
DE 85737 Ismaning
T +49 (0) 89 53 29 50 - 0
info@ig-pflanzenzucht.de
ig-pflanzenzucht.de



Scandinavian Seed AB
Box 840
SE-531 18 Lidköping
T +46 (0) 5 10 48 40 50
info@scandinavianseed.se
scandinavianseed.se



Agrovista UK Ltd
Rutherford House
Nottingham Science and
Technology Park
University Boulevard
GB-NG7 2PZ Nottingham
T +44 (0) 115 9 39 02 02
enquiries@agrovista.co.uk
agrovista.co.uk



Nordic Seed A/S
Kornmarken 1
DK-8464 Galten
T +45 88 87 51 00
post@nordicseed.com
nordicseed.dk