

# CAULIFLOWER

ENZA ZADEN



## Janvel F1

- Self-covering, bright white heads
- Strong plant habit
- Produces high quality heads under cooler climates
- Late maturing for Fall harvest

MATURITY	HARVEST PERIOD	PLANT
90-95 Days	Fall	Very Large, Strong Wrap
HEAD SHAPE	TARGETED REGION	PRODUCT FORM AVAILABLE
Semi-Dome	Northern Regions	Organic



## Mardi F1

- Early maturity
- Uniform, dense heads
- Partially self-covering
- Upright leaf habit

MATURITY	HARVEST PERIOD	PLANT
70-75 Days	Spring and Fall	Upright leaves
HEAD SHAPE	TARGETED REGION	PRODUCT FORM AVAILABLE
Semi-Dome	Northern Regions	Organic

All Vitalis cauliflower varieties are developed using self-incompatibility, and do not incorporate cytoplasmic male sterility (CMS). See Fact Sheet on reverse side for more information.

### DISCLAIMER

Descriptions, recommendations and illustrations included correspond as closely as possible to tests and practical experience. This information is provided to assist professional growers and users; however, variable local conditions must be taken into account. Under no circumstances shall Enza Zaden accept liability based on such information for deviating results in the cultivated product. The purchaser is responsible for determining whether the items are suitable for the intended cultivation type and location.

## CONTACT INFORMATION

**Adrienne Shelton**  
Organic Product Specialist,  
Northeast/Midwest US  
+1 703-231-5377  
a.shelton@enzazaden.com

**Shaina Bronstein**  
Organic Sales Representative,  
Northwest US/Western Canada  
+1 831-737-0525  
s.bronstein@enzazaden.com

**Amy Kaplan**  
Sr. Organic Product Specialist,  
California/Southwest US  
+1 831-998-1413  
a.kaplan@enzazaden.com

**Erica Renaud**  
Regional Business Manager,  
Vitalis & Herbs North America  
+1 831-262-7635  
e.renaud@enzazaden.com

7 Harris Place | Salinas, CA 93901 | [customer.service@enzazaden.com](mailto:customer.service@enzazaden.com) | Toll Free +1 855-800-ENZA (3692)

[www.vitalisorganic.com](http://www.vitalisorganic.com)





All Vitalis Organic Seeds are Certified Organic. We are committed to producing the highest quality organic seed, free of contaminants and adapted to the needs of diverse organic agriculture systems worldwide.

### **We believe that organic agriculture begins with organic seed.**

All Vitalis varieties are developed without the use of genetic engineering and meet all organic certification requirements for the EU, US, Canada and Mexico.



### **NO GMO Policy**

Enza Zaden and Vitalis have non-GMO declarations which state that all varieties currently released for testing and for sale have been developed through conventional breeding work, without the use of genetic modification techniques.

From breeding to production, no Vitalis seeds are derived from or produced using Genetically Modified Organisms or their derivatives, and all reasonable steps have been taken to avoid any such contamination.

### **What is Cytoplasmic Male Sterility (CMS)?**

Cytoplasmic Male Sterility (CMS) is a trait that prohibits the plant from producing viable pollen grains. This allows for the plant to be pollinated by another pollen source, and to produce seeds that have been cross pollinated without the risk of self pollination. CMS can occur naturally, but is often achieved through a manipulated cell fusion process known as "somatic cell hybridization." Historically, CMS has been used in traditional plant breeding programs to assist in hybrid development and seed production, especially for crops in the Brassica family, such as broccoli and cauliflower.

### **Does Vitalis Organic Seeds offer varieties produced using CMS?**

No, Vitalis does not sell varieties that have been produced using CMS. While seeds produced with CMS are currently allowed under the USDA organic regulations, there are some organic certification agencies in Europe that prohibit this technique in organic systems. In order to provide our customers worldwide with organic seed that meets the highest ethical and biological standards, Vitalis has chosen to not produce products derived using these methods.

### **How are Vitalis cauliflower varieties developed?**

An alternative to CMS is a system of self-incompatibility (SI), which is naturally occurring in some Brassica populations. SI is based on a genetically-controlled physiological hindrance to fertilization, rather than sterility. Once the SI trait has been crossed into a parent line using conventional breeding techniques, it can be used in hybrid seed production without the need for cell fusion. All Vitalis cauliflower varieties are developed using this SI system.