



VEGENOV (BBV)

Site internet : <https://www.vegenov.com>

Structure backed by: CTIFL

Key figures

Workforce

In 2020 : 35 employees, 7 Doctors, 6 engineers

Alongside the CTIFL and in complementarity with this national institute, Vegenov has developed R&D skills in biotechnologies applied to plant breeding, the evaluation of plant protection and nutrition products and the evaluation of the quality of plant products.

Vegenov offers confidential R&D services to breeders, seed and seedlings producers, agrochemists, producers and distributors.

Certified ISO 9001 for its research and development activities, and for technological watch and literature studies, Vegenov offers services in the following fields:

- Cell biology and in vitro culture,
- Molecular biology, support in marker-assisted breeding genetic fingerprints of plants and their associated microorganisms (pathogenic and beneficial),
- Evaluation of the efficacy and mode of action of plant protection and nutrition products (biocontrol products, herbicides, biostimulants, etc.).
- Sensory and nutritional quality of harvested products,
- Monitoring, advice and support for innovation.

Initiated on vegetable crops (cauliflower, broccoli, artichoke, shallot and tomato), these skills are today proposed to other crops and other technical institutes of Acta.

Vegenov is a Technological Resource Center (label of the Ministry of Research) and a technical institute linked to the Ctifl. It is involved in various networks (Acta, ASF, UFS, AFAIA, IBMA...) and competitive clusters (Valorial, Végépolys Valley...).

Maintaining a privileged relationship with public research (INRAE, CNRS, Universities), Vegenov is a member of the AgriFood Transition Carnot Institute, of Biogenouest and an emulator of the Emergys incubator.

Contacts

President :
Michaël QUERNEZ

Director :
Serge MABEAU

Cell biology :
Murielle PHILIPPOT
E-mail : philippot@vegenov.com

**Plant protection and nutrition
R&D manager :**
Marie TURNER
E-mail : turner@vegenov.com

Molecular biology R&D manager :
Céline HAMON
E-mail : hamon@vegenov.com

**Sensory and nutritional quality
R&D manager :**
Céline BATY-JULIEN
E-mail : baty@vegenov.com

Innovation project manager :
Christophe BAZINET
E-mail : bazinet@vegenov.com

Information manager :
Juliette CLÉMENT
E-mail : clement@vegenov.com

Administrative manager :
Agathe GERMAIN
E-mail : germain@vegenov.com

Regional office

- **Bretagne**

Siège
VEGENOV-BBV
Pen ar Prat
29250 SAINT POL DE LEON
Phone: 02 98 29 06 44
Fax: 02 98 69 24 26

Areas of expertise

- **Supporting the creation of new varieties :**

Molecular marker genotyping, cell biology and in vitro culture, screening for varietal resistance, evaluation of sensory and nutritional quality.

- **Contributing to the reduction of inputs :**

Evaluation of the efficacy and mode of action of plant protection and nutrition products (biocontrol products, herbicides, biostimulants...) under controlled conditions, detection and monitoring of microorganisms.

- **Evaluating sensory and nutritional quality :**

Study of the impact of agronomic parameters, crop itineraries and post-harvest operations on the nutritional composition and organoleptic quality of fresh produce.

Areas of research

- Molecular marker genotyping and haplome methods in support of plant breeding
- Evaluation of alternative methods of disease control
- Evaluation of biostimulant products
- Monitoring of microorganism populations
- Sensory and nutritional evaluation, study of digestive discomfort

Publications

About ten scientific publications and/or popularization publications for professionals per year. Here are a few references:

LONJON F., RENGEL D., ROUX F., HENRY C., TURNER M., LE RU A., RAZAVI N., RUBEINSTEIN S.C.R., GENIN S., VAILLEUAU F. HpaP sequesters HrpJ, an essential component of *Ralstonia solanacearum* virulence that triggers necrosis in *Arabidopsis*. September 2019, *Molecular Plant-Microbe Interactions*.

MAILLARD A, SORIN E, ETIENNE P, DIQUÉLOU S, KOPRIVA S, ARKOUN M, GALLARDO K, TURNER M, CRUZ F, YVIN JC, OURLY A. Non-specific root transport of nutrient gives access to an early nutritional indicator: the case of sulfate and molybdate, *PLONE* 2016.

ALJABAL M., PICOT A., TURNER M., GOULITQUER S., CHARTON S., LEBLANC C., NEEMA C., HALLIER S., 2015 - "Impact of abiotic stresses on the protection efficacy of defense elicitors and on metabolic regulation in tomato leaves infected by *Botrytis cinerea*". *European Journal of plant Pathology*, Volume 142, pp 223-237.

HAMON C., COYNE C.-J., MCGEE R., LESNE A., ESNAULT R., MANGIN P., HERVE M., LE GOFF I., DENIOT G., ROUX-DUPARQUE M., MORIN G., DELOURME R., BARANGER A., PILET-NAYEL M.-L. - " QTL meta-analysis provides a comprehensive view of loci controlling partial resistance to *Aphanomyces euteiches* in four sources of resistance in pea ". *BMC Plant Biology*, 2013, vol.13, n°45.

Extension publications and specialized press

HAMON C., ROBY C., PENGUILLY D., COLLET J.M., GOUEZ C., ROSTOLL G., JUIN A. Monitoring airborne fungal diseases - *Phytoma* n°732, 2020 - p.35-38

BATY-JULIEN C. Vegetables, a source of protein? Small practical guide. *Aujourd'hui & Demain*, n°139, 2019, p.27-28

MENIL A., CHAUVIN J.E., PELLE R., BOUSSEAU M., GAUCHER D., BEAUVALLET G., MAUMENE C., ANDRIVON D., PASCO C., VAL F., BARBARY A., TURNER M. Fight against mildew: combining biocontrol with other methods. *Phytoma*, n°721, 2019, p.21-25.

HAMON C. SAM is becoming routine. *Cultivar Les enjeux*, Special issue n°28, 2018, p.XXVI-XXVII

TURNER M., MONOT C., MENIL A., BOUKHACHAB S., GUILLOU A., FLOURY A. Spray quality, laboratory conditions and experimental stations - Results of comparisons. *Aujourd'hui & Demain*, n° 135, 2018, p.30-32.

MARFAING H., BATY-JULIEN C., HARNAY S., LE PAGE J.F., BONNIER V., GARIN M.L., DESCHAMPS C. Influence of food processing treatments on the textural, sensory, nutritional and culinary qualities of seaweed food. *Industries Alimentaires et Agricoles*, September-October 2017, p.22-24.

TURNER M., MENIL A., Alternative treatments. *Vegenov is testing new biocontrol products*. *Potato Planet*, n°39, July 2016, p.82-83.

PORTENEUVE C., BATY-JULIEN C., ESTORGUES V., MAITRE R., PENGUILLY D., MERENDET V., MERY A., RAYNAL C., SERRURIER M., VILLENEUVE F., ERARD P., " Les chou à inflorescence : cauliflower, cabbage broccoli, Romanesco cabbage ". *INFOS CTIFL*, 2015, p. 47-63.

The trainings

School education programmes

Contribution to different university courses: Agrocampus Ouest, universities, IUT, agricultural high schools etc.

Frequent supervision of trainees and PhD students.

Professional training

Vegenov offers training in its scientific and technical fields of expertise.

Vegenov is a certified Training Provider (Declaration number: N°5329P013929). It develops customized and personalized training courses within or between companies, in accordance with the analysis of the needs of the requesting structure and in consultation with the trainees.

Mobilizing its own resources or calling upon qualified experts, Vegenov organizes customized training actions and contributes to reinforce the performance of companies through the development of competences and the qualification of human resources.

For the past two years, a training course on "The implementation of modern technologies in breeding: doubled haploids, marker-assisted selection, genomic selection." is offered to scientists or decision-makers involved in breeding programs. For more information, contact Agathe Germain.

Contact: Agathe Germain- Administrative Manager: 02 98 29 06 44 germain@vegenov.com

Website: www.vegenov.com