



Want to make an allergen-free and vegan wine?

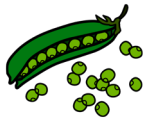

People all over the world are demanding wines free of allergens and vegan friendly. This raises a few challenges for our winemaking processes - How do I flotate my juices without gelatine? With no more casein in my wine processes, what else can I use as a fining agent?

It might be a bit more effort but the upside of using allergen free and animal-free based products, means your wines are accessible to everyone – no matter what your preference; no declarations on your labels and it is a guarantee of food safety for the consumer. A win-win for all.

Sign me up you say? Enartis is here to help with our wide variety of replacement products to ensure maximum benefits. An allergen and animal free wine starts during harvest time. Below are some suggestions for the replacement of allergen and animal additives used for juice treatment.

Plantis AF and Protomix AF pea protein based products for juice treatment during settling, flotation and fermentation

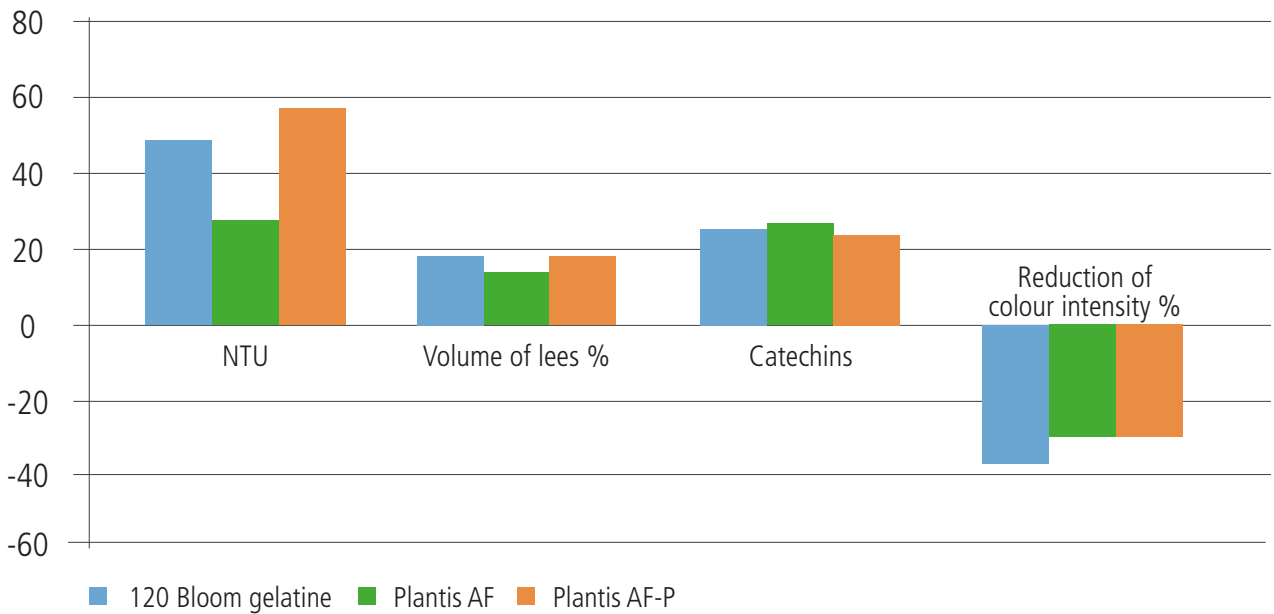
Plant proteins derived from pea and potato are the most obvious alternative to fining protein of animal proteins..

| Plant protein | Origin | Dosage | Reduction of color intensity | Reduction of catechins | Rapidity of flotation | Yield in flotation |
|---------------|---|-----------|------------------------------|------------------------|-----------------------|--------------------|
| PLANTIS AF |  | 5-10 g/hL | 🍷🍷🍷 | 🍷🍷🍷 | 🍷🍷🍷 | 🍷🍷🍷 |
| PLANTIS AF-P |  | 5-30 g/hL | 🍷🍷 | 🍷🍷 | 🍷🍷 | 🍷🍷🍷 |



For juice settling and flotation, we suggest PLANTIS AF. This pure pea protein is very effective for clarifying the juice and forming compact lees. Additionally, it helps to remove iron from the juice and the wine thus helping to minimize the risk of haze, browning, pinking and loss of aromatics.

LAB TRIAL OF FLOTATION ON VIOGNIER JUICE

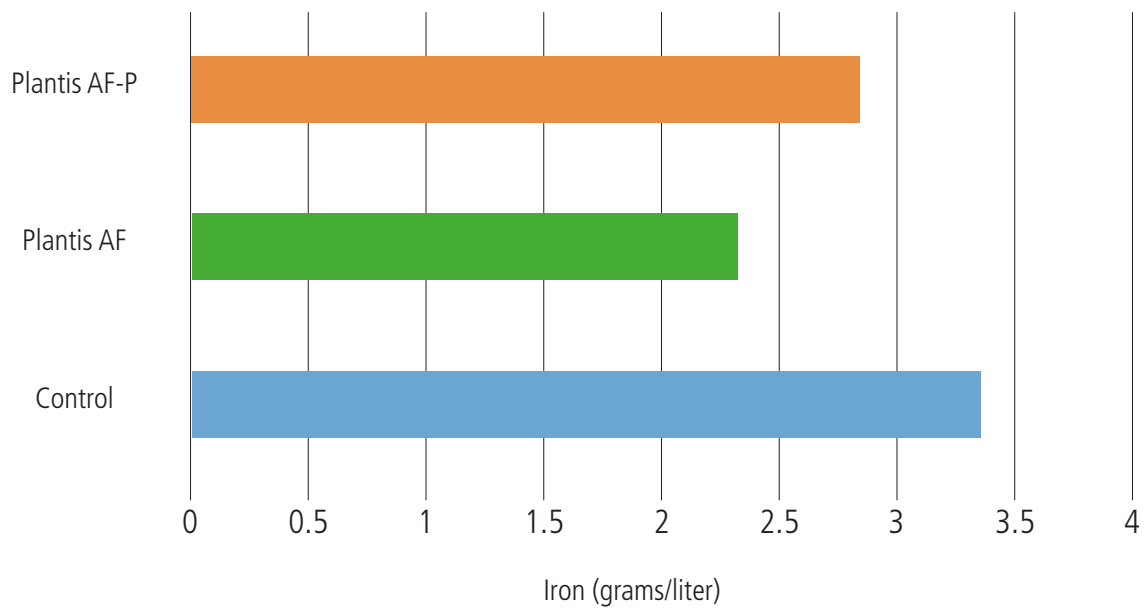


Industrial trial on Airen juice: 2 hours enzymatic treatment with 2 mL/hL Enartis Zym 1000 SL, flotation of 640 hL (Plantis AF-P) and 460 hL (Plantis AF). Racked off the clear juice after 8 hours.

| | Airen juice (8.5% solids) | Plantis AF-P (5 g/hL) | Plantis AF (5 g/hL) |
|------------------|---------------------------|-----------------------|---------------------|
| NTU | > 1000 | 60 | 69.3 |
| Clear juice (%) | | 93 | 92 |
| Colour intensity | 0.94 | 0.73 | 0.66 |
| OD 420 nm | 0.64 | 0.55 | 0.48 |
| Catechins (ppm) | 4 | 1.7 | 3.6 |



PLANTIS AF REMOVES IRON



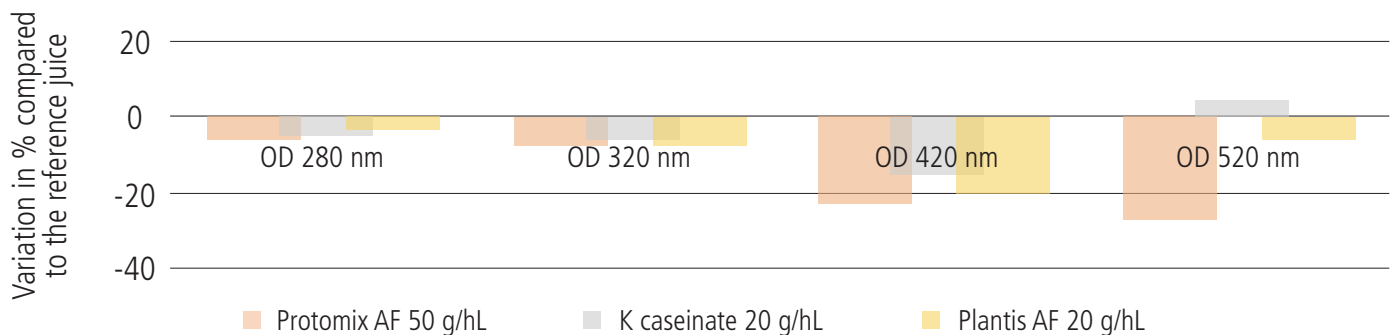
Dosages can be between 5 and 10 g/hL. The use in combination with bentonite is recommended in case of difficult juice or if you look for a stronger clarification.

During fermentation, when you add PROTOMIX AF - this product assists in decreasing the polyphenol content, ensuring a fresh colour hue and deliver clean and fresh aromas.

This is essentially an allergen free and animal free alternative to potassium casein. PROTOMIX AF is made of bentonite, pea protein, PVPP and cellulose. The cellulose fraction helps fermentation by giving physical support to the yeast and favouring the loss of CO₂.

Dosages can vary from 40 to 100 g/hL

EFFECT OF PROTOMIX AF IN REMOVING POLYPHENOLS AND COLOUR





Lysozyme is so yesterday! Welcome to enartis STAB MICRO M: control of lactic bacteria and so much more...

STAB MICRO M is a chitosan based fining agent with broad spectrum antimicrobial effect. It was specifically designed to treat juices and "dirty" wines. Amongst its numerous applications, the addition of STAB MICRO M at the end of the alcoholic fermentation stops the growth of lactic acid bacteria and prevent an unwanted or early onset of malolactic fermentation.

Moreover, it is active against other bacteria and non-Saccharomyces yeast that can spoil wines at this stage of the fermentation.

By simply removing the STAB MICRO M lees at the end of the treatment you allow for MLF with your choice of inoculation MLB.

Recommended dosage is approximately 15 - 20 g/hL.

Contact your Enartis team for more advice on how to use this product.

STAB MICRO M PREVENTS MALOLACTIC FERMENTATION ONSET

