OmyaPro[®] Calcium in apples - Romania - 2017



Aim

Determine the effect of foliar application of OmyaPro® Calcium on apple yield and quality.

Method:	The specified amount of each product was mixed in water, stirred and applied immediately without adjuvant with a backpack applicator directly on the leaves.	
Trial design:	open field trial, randomized block design	
Crop description:	apples, Idared variety	A CONTRACT

Protocol

Product	Ca (%)	Product Rate	Rate (kg Ca/ha)	Applications
Untreated	-	-	-	-
Common practice (CaCl ₂)	12 %	10 lt/ha	1.57	3 times (from BBCH 73 to 75)
OmyaPro [®] Calcium	36 %	4.35 kg/ha	1.57	3 times (from BBCH 73 to 75)

Results







Omya International AG – Baslerstrasse 42, CH-4665 Oftringen www.omya.com - +41 62 789 2929

OmyaPro® Calcium improves the Calcium nutrition of the crops. As Calcium is an essential part of the plant's cell walls and cell membranes, this is strengthening the structure of the fruits and the whole crop.

Trial results showed an increase of 8 % in the fruit size compared to untreated check.

Moreover, field data showed that applying Calcium to the crop in the form of pure calcium carbonate improved the Brix content of the fruits. The percentage of Brix is related to the fruit sugar content and this is one of the factors that can influence the postharvest quality of the yield.

The bitter pit incidence in the trial plots treated with OmyaPro[®] Calcium was almost zero compared to the untreated check.

Higher yield with no bitter pit symptoms means increased marketable production for the farmer.



Brown rot which is one of the most important causes of fruit losses in the field and also postharvest did not affect the fruits treated with OmyaPro[®] Calcium in comparison to the untreated. As Calcium reinforces the cell walls, makes the plant tissue stronger and more resistant against pathogens' invansion.



Conclusions

OmyaPro[®] Calcium improves Calcium nutrition of the crops. As a pure source of calcium, it supplies to the crop sufficient amount of this essential element and eliminates the yield losses caused by Calcium deficiency.