Object : analysis on samples of Rootguard dripline Ø20mm– 4lph installed on field since 10 years .

The analysis in question wants to prove if in 10 years, term that defines the product warranty, the
following article Mono Rootguard Dripline Ø20mm - 4lph retains its functionality and if the drippers
taken in the field still show traces of herbicide. This would indicate an operation also
higher than the maximum time of the use commercially defined.
We have received 5 samples (not too much to have a number of really indicative data) but enough to impress some considerations .
To understand the concepts expressed above , we have performed two analysis methods that can be enclosed in :
1) Define a technique of analysis of the product that indicates the correct functioning of the same.
2) Determine through laboratory test the presence of the herbicide within the dripper.
Referring to the first point , It is possible to be performed by two techniques : a non-distructive technique ,through which you can determine the flow-rate of the dripper , the precence of roots inside the dripper would compromise its functionality .
The other technique is the destructive one which consists in dissecting the dripper and checking for roots next to the area of the dispensing hole . It has gone straight to the dripper control through the study of section of the dripper taking pictures of the affected area. As you can see from the photos (1 - 2 - 3), there is no trace of roots inside, if not the presence of a bit 'of soil.

Photo 1 [Sample 1]

Photo 2 [Sample 2]

Photo 3 [Sample 3]

This analysis allows us directly and irrefutably affirm that the product Rootguard work correctly for all 10 years of his life in the field, not allowing the roots to enter inside. The more difficult question remains however still present in the detection of the herbicide polymer mass, so a possible concentration within the dripper which would mean yet intrusion protection and consequently extension of the period of use in the field. The methods used in the laboratory to try to understand if the following drippers still had traces of herbicide have not given any feedback. The only consideration that we can do, relate to releases of traces found in the bag in which were placed the 5 samples, precisely near to the adhesive label (photo 5), this takes a little color "yellow" as a product of migration of the Rootguard additive.
Photo 4 [label ]
Photo 5 [label : rear side with evident release (yellowy)

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