

Fighting Scab Naturally



AGRICLAY™

With Clay Suspension Technology™

AGRICLAYTM_{A6}

Made with ARGIMIX Clay Suspension Technology™

- In furrow and foliar spray applications
- Works on infected tuber
- Improves marketable yield
- Improved economical and biological impacts

The ingredients contained in AGRICLAY A6 allow it to be used in conventional, sustainable and organic potato production. The European Montmorillonite clay used in the AGRICLAY A6 is a phyllosilicate rich in minerals and trace minerals. It is known to have a high adsorption property and may adsorb dissolved and suspended substances, such as toxins and bacteria. Clay minerals have also a high cation exchange capacity.

Research has shown that, repeated applications of clay mineral suspensions have the potential to reduce the negative impact of soil borne pathogens. Field trials were performed to measure the potential of clay suspensions to control potato scab, caused by *Streptomyces scabies*. Results have shown that clay suspensions have a biological impact in reducing the incidence of scab on potatoes.

Disease management - mode of action

Research and scientific literature have now started to explain the mode of action of clay suspensions. The adsorption of the bacteria and its removal from the surrounding environment may explain the results observed. Alternatively, the immobilization of the bacteria on the surface of clay minerals may alter certain cell-wall activities of the pathogens thus limiting its negative effect. These cell-wall activities may have a multiple impact: physically blocking regions of the bacterial surface, reducing its ion bonding capacity, interacting with some membrane proteins, chelating some essential microbial nutrients and dissipating the proton motive force.

Recent trials have also demonstrated the potential for the clay suspensions to limit the incidence of rhizoctonia (black scurf) and silver scurf. Additional experiments are being conducted to confirm these findings.

Yield improvement

Clay minerals are "chemical sponges" which hold water and plant nutrients weathered from other minerals. Nutrients may be made available for the plants in a unique fashion due to the high cation exchange capacity of the clay suspensions and their content of plant micro-nutrients. Recent trials have demonstrated that the clay suspensions contained in AGRICLAY A6 may have a positive impact on the crop health and yield.

BEFORE



AFTER Using Agriclay



Please visit our website for the results of our 2006 trials and to purchase our products. Distributor inquiries are welcome.

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Storage and Disposal

Store in a cool dry area away from direct sunlight. Keep container closed when not in use.

Keep out of reach of children.

PREFERRED METHOD OF APPLICATION

Shake well before use.

Agriclay A6 can be applied in furrow, in banded applications or with broadcast sprayers. The recommended preventive application procedure is to apply first at planting followed by a second application prior to hilling.

In-furrow

For in furrow applications, apply Agriclay A6 as an in-furrow spray at a rate of 0.84 oz to 1.1 oz per 1000 ft row with 5 to 15 gallons of water per acre at planting.

Banded application

Apply product directly after planting and prior to the first cultivation at a rate of 0.84 oz to 1.1 oz per 1000 ft row. Direct the spray at the soil to provide thorough coverage of the lower stems and the soil surface surrounding the plants. Agriclay A6 may be applied during cultivation or hilling operations to provide soil incorporation.

Rate per 1000 Row Ft	Product Per Acre (oz)						
	22in	30in	32in	34in	36in	38in	40in
0.84 oz	20.0	14.6	13.7	12.9	12.2	11.6	11.0
1.1 oz	26.1	19.2	17.9	16.9	16.0	15.1	14.4

Row ft per acre:	23760	17424	16315	15374	14520	13754	13068
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Broadcast Sprayer

Apply product directly at planting and prior to the first cultivation at a rate of 12.9 oz to 16.9 oz per acre. Agriclay A6 may be applied during cultivation or hilling operations to provide soil incorporation.

Use the higher rate when the soil conditions are conducive for disease development or if the field has a history of disease.

Corrective application rates*

Apply the product at a rate of 12.9 to 16.9 oz directly after planting. Apply a second application of 12.9 to 16.9 oz per acre no later than when your IPM scouting reveals scab lesions at a diameter of 1/8 inch or 0.5 cm on 10 tubers in a sample of 10 feet. Apply the material for the rest of the season every 30 days until the crop is dug. The sooner Agriclay A6 is applied the more effective it will be.

If the material is to be used as a corrective action it is important that the grower conduct frequent tuber samples as part of their integrated pest management program. The best way to do this is to dig 10 foot sections of the field and examine tubers every week in areas that are known to be prone to scab. Record the results and when the levels discussed above are met the applications should begin and be continued.

Use the higher rate when the soil conditions are conducive for disease development or if the field has a history of disease.

*It is the recommendation of Arclay LLC that the product be used in a preventative (prophylactic) manner and the results obtained from corrective applications will not be as effective as the preventative or prophylactic application

DIRECTIONS FOR USE: It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

NOTES:

- AGRICLAY A6 product should be applied alone with at least 5 to 10 gallons of water per acre for in-furrow and 15 gallons of water per acre for other application methods. Any combination of products to be applied with AGRICLAY A6 should be tested for compatibility prior to use.
- Mixing AGRICLAY A6 with certain surfactants, foliar fertilizers, or other pesticides may cause crop injury. Crop sensitivity to a particular combination should be determined by spraying a small area of foliage and fruit. Evaluate 3 to 7 days later for adverse effects.
- To assure the compatibility of AGRICLAY A6 with these and other products, mix the AGRICLAY A6 and other spray products into a small container with the appropriate amount of water. After thorough mixing, let stand for 5 minutes. If the combination remains mixed, or can be re-mixed readily, the mixture is compatible

GUARANTEED ANALYSIS:

Montmorillonite Clay Suspension 100%

CONDITIONS OF SALE: 1. Seller warrants that this product consists of the ingredients specified and is reasonable fit for the purpose stated on this label when used in accordance with directions under normal conditions of use. No one, other than the officer of Seller, is authorized to make any warranty, guarantee or direction concerning this product. 2. Because the time, place, rate of application and other conditions of use are beyond Sellers control, Sellers liability from handling, storage and use of this product is limited to replacement of product.

PRODUCT INFORMATION

AGRICLAY A6

Item#	Quantity per unit	Unit per case
A6-33	33.8 oz (1L)	1
A6-128	1 Gallon (3.8L)	1

Larger container sizes available upon request