SOLUTIONS

1-888-737-0907 info@penergeticsolutions.com

PENERGETIC B WV (WILDLIFE DETERRENT)



penergetic b "

Field Protection from Intruding Wildlife

- Protects crop and fields from damage by wildlife
- Suitable for control of wild boar and deer
- Overcomes need and cost of fencing (including electrified)
- Alternative protection method for stored grain and/or forage
- Helps limit (potential) spread of wildlife-borne disease
- Shown to be effective even after precipitation
- Odorless and non-toxic to humans and animals

OUR PRODUCTS

Crop Production

Manure

Management

Feed Additives

Wildlife Deterrent

Water Management

WILDLIFE DETERRENT

Penergetic b WV is a unique, new product developed by Penergetic International, of Switzerland, initially intended to address the chronic problem (in Europe) of damage to farmland and crops caused by wild boar. Based on farm use in Europe, penergetic b WV has demonstrated that it offers an environmentallyfriendly and effective means of controlling detrimental wildlife (e.g. wild boar, deer) from entering onto and causing damage to farmland and crops.

Unfortunately, wild pigs (or feral swine) are not a problem unique to Europe. As the following statistics (from a USDA report) indicate, feral pigs are already a serious problem in much of the U.S. The problem is also spreading rapidly into other U.S. states as well as in Canada.

- Wild hogs are in at least 39 states and cause up to \$2.5 billion in damage annually
- More than 5 million of the feral swine roam the U.S., with Texas having the biggest share
- Wild pigs are a menace for agriculture, but also a health risk and threat to native wildlife
- The federal government spends over \$30 million annually to fight the problem and is seeking additional funding support

As one wildlife control officer put it:

"If feral pigs aren't already a problem in your area they soon will be."

A feral sow can have three (six piglet) litters annually and current management approaches, which include: hunting, using poisoned grain (as bait) and erecting physical barriers (including electric fencing) are proving to be grossly inadequate to control the problem or its spread.

EXAMPLES OF FIELD AND CROP DAMAGE CAUSED BY WILD PIGS

Unfortunately, other wildlife – such as Whitetail deer – can also wreak havoc to a farmer's fields. In some parts of the U.S. the problem of deer eating growing crops has been so severe that farmers have, in some cases, stopped growing particular crops.

Although more recent statistical data is hard to find, in 2001, The U.S. National Agricultural Statistics Service (NASS) estimated that animal-related losses to field crops, vegetables, fruits, and nuts exceeded \$765 million USD. Whitetail deer were responsible for 58% of field crop losses and 33% of losses to vegetables, fruits, and nuts. For certain vegetable crops – sweet potatoes, certain greens and the like – deer damage can be catastrophic. Soybeans, cotton, and corn are among the favorite field crops of Whitetail deer. In field trials, in the U.S. (and Europe)

penergetic b WV has proven to be a practical alternative solution in discouraging deer from entering and damaging farm fields.

DEER IN FARM FIELD – A SOURCE OF CROP DAMAGE

Besides offering protection from wildlife damage to standing / growing crops, penergetic b WV can also act as a deterrent in keeping feral pigs and deer away from stored grain, silage and hay supplies. Grain bags seem to be increasingly prone to damage by deer which can lead to spoilage, loss of grain and lost revenue. Likewise, wild boar have been known to burrow into silage in open silage bunks causing damage and soiling of livestock feedstocks. Hay storage – in fields or in open sheds – can also prove to be attractive to roaming wildlife leading to unwelcome damage.

Here again, penergetic b WV can be utilized as a means of deterring unwanted wildlife intruders from consuming, spoiling and/or damaging these important stored farm resources.

BENEFITS

Penergetic b WV acts as a deterrent – like a "virtual fence or barrier" – discouraging unwanted wildlife from entering a field where the product has been applied.

Penergetic b WV can effectively prevent game/wildlife from causing major damage to farmland, even in fields near forests or exposed areas, e.g. wetlands, ravines and mud holes. It represents a promising new approach to wildlife management and an attractive alternative means of reducing the economic disruption wild boar (and other problem wildlife) can cause to agriculture.

APPLICATION

Penergetic b WV offers a novel, new approach. It is field applied as a spray application – onto soil, no-till residue or crop.

It can also be mixed with (and applied at the same time as) other spray agents (or liquid manure).

APPLICATION RATES

Full field rate: 8.4 oz./acre over the entire field area
Perimeter rate: 14.0 oz./acre over the outer perimeter

of the field, at a minimum width of 120 feet

Note: consult your Penergetic distributor for any site specific variations to these recommended application rates.

** In areas of high wildlife pressure a second application is recommended – applied at a crop height of 20" to 28". Penergetic b WV has been shown to remain effective even after exposure to field precipitation.

Application Rate adjacent to Grain / Silage Storage Areas:

8.4 oz./acre around the perimeter at a width of 180 feet.

** Depending on various factors (e.g. weather, duration of storage and level of wildlife pressure) additional applications may be warranted.

PACKAGING/PRODUCT SIZE

PRODUCT 8.0 KG
SIZE | 17.6
LBS.

PRODUCT MIXING AND HANDLING

***Consult with your local sales rep prior to using this product to discuss your site-specific application needs, gallons of water per acre required, as well as any other mixing and handling recommendations. See contact info below.

Precautions to Use

In mixing and handling penergetic b WV-proactive always use clean water. It is a requirement that the spray tank, nozzles, screens, filters and lines have been thoroughly cleaned following the last use and prior to using this product in your sprayer.

Screen Size

50 mesh screens or larger should be used with this product to minimize the chance of plugging issues. Removal of downstream nozzle screens and/or spray tip screens is also an option assuming the spray tank is clean of dirt and unwanted debris.

Particle Size

Zeolite, the principle ingredient in penergetic b WVproactive is classified as fitting into the wettable powder category.

Wettable powders (and therefore Zeolite) are tank mixed first. W.A.L.E.S. and other spray tank mixing order acronyms (where W = wettable powders and A = agitate) attest to this.

It is important to mix in product slowly and allow some time (say 5.0 minutes) between one product appearing to be fully mixed in and the other product if there is one being used. Be sure to read and follow the mixing and application instructions respecting any other product you may be mixing into the same tank as penergetic b WV-proactive and only mix and use it properly.

Agitation

Agitation is a key aspect of any successful operation of any sprayer, and tank agitation is especially important in the case of wettable powders. Agitation is required to mix the wettable powder into the water causing it to become

miniscule suspended particles. Constant agitation also works to keep these particles in suspension.

Once the spray tank is half filled with water (and before any product is added to the tank) the tank agitation must be turned on and be functioning properly. It is important to check to ensure the agitation is calibrated correctly, including not create too vigorous an action on the surface of the water in the spray tank. Too much agitation can be just a problematic as not enough as it can lead to foaming, which can impair the mixing process of the wettable powder into the water. Check the sprayer manual for proper agitation settings and operation.

**The agitator should be left on at all times while the sprayer is being used with this product in order to keep it suspended.

Shutdown and Cleanup

Once the field spraying operation is completed and before the sprayer is put away it is important that the sprayer is completely rinsed out, boom lines and nozzles flushed out and screens inspected/cleaned. Furthermore, if for any reason the spraying operation is suspended for any length of time, then reagitate spray solution for a minimum of 5-10 minutes on medium to high agitation before resuming spraying operation. Always consult your sprayers owner's manual for additional shut down and cleaning procedures.

Premixing

Best recommendation is to premix the amount needed into a clean container/bucket of water. 2-3 gallons of water per ½ pail of penergetic b WV-proactive, stir vigorously and then add to an agitating sprayer. Repeat this process if a full pail is being used. Some farms set wettable powder on the basket screen (or sieve) that protects the spray tank opening, and using a hose, will wash the wettable powder though the basket screen and into the agitating tank.

If pre-mixing with a chem-handler type unit, add appropriate amount of product slowly into the agitating unit and then add to the agitating main sprayer.

FIELD RESULTS

First introduced in Europe, penergetic b WV has been successfully used in several countries. In Germany, where the product was first used, feedback from users/farmers has included:

"The best product available on the market."

and

"Field treated with penergetic b WV showed significantly less damage from wild boars".

Elsewhere in Europe, positive results have also been documented in Finland, Poland*, Switzerland and elsewhere.

* = For instance in Poland, although Penergetic b WV was initially principally intended as a deterrent against wild boar, it has since proved to be effective in preventing deer from entering & causing damage to a farm fields.

Write-ups on some of the trial results in Europe are provided below and/or at the end of this section titled: Information Downloads. A result with product use on soybeans is provided below. The use of Penergetic b WV is relatively more recent in North America (started just in mid-2020). As more results are documented they will be added to the website – so check back, again, later.

VIDEO - SWITZERLAND



OTHER TRIAL RESULTS

Other trial results are available (below) in the section called Information Download.

Other trial results will be added to this site as this information is available.

CONCLUSION/SUMMARY

Each year wildlife, such as feral pigs and Whitetail deer, cause extensive damage to agricultural fields, crops and

stored grain and feed. Penergetic b WV offers a unique, alternative means of helping to prevent or at least minimize this damage. There is no 100% protection – not with chemicals, electric fences or penergetic. What we can offer is a product that is non-toxic, odor free, and non-harmful and should work even if there is precipitation.

Penergetic b WV is a realistic approach to deterring feral pigs and deer for both conventional and organic agriculture.

INFORMATION DOWNLOADS

For more information on penergetic b WV the following downloads are available:

<u>Penergetic b WV – proactive Information Flyer</u>

Penergetic b WV - proactive Pictorial Flyer

Penergetic b WV Application Options - diagram

Penergetic b WV - Grain Bag Perimeter Coverage

Penergetic b WV - BH Genetics Branded Flyer

Penergetic b WV - Wild Boar Results - Germany

Penergetic b WV Wild Boar Problems - Poland

Penergetic b WV Deer Problem – Poland

Penergetic b WV Deer and Soybeans - Bennettsville, SC

Penergetic b WV Wild Boar and Railway RoW - Poland

Penergetic b WV and Grizzly Bear - Alberta

Mixing And Handling Instructions for Penergetic b WV-

<u>proactive</u>

OMRI Certificate (Penergetic b WV for Soil)

OMRI Certificate (Penergetic b WV - proactive)

Penergetic @2019 | website by: Whistler Web & Print