

ATTACK WHITE MUSTARD

Sinapis alba

DESCRIPTION

Attack White Mustard, when used in cover crop systems, can help break the break pest cycles and reduce damage to cash crops that follow in the rotation. The benefits of bio-fumigation are realized when Attack is chopped/shredded and incorporated into the soil, breaking down the glucosinolates to isothiocyanates. Attack White Mustard also improves soil and water quality and increases farmland productivity. Attack is an agronomic tool to help manage soil-borne pests while alleviating soil compaction, capture, recycle and redistribute nutrients, enhance the seedbed for the following crop, reduce leaching, runoff and erosion, build soil organic matter and microbial action, and attract beneficial insects. Attack's roots reach deep into the soil profile, penetrating hard pan and provides channels that improve aeration and moisture retention. Attack White Mustard is a release from Joordens Zaden, the leading developer of cover crop germplasm and cover crop systems use in Europe.

MANAGEMENT

Grows best in cool, moist growing condition with soil pH of 6.0-7.5.

Not tolerant of shade, standing water, or severely nitrogen deficient soils.

Establishes quickly with adequate moisture and when planting occurs after manure, sludge, or starter fertilizer application.

Plant after the harvest of primary crops or aerial seed into standing corn or soybeans when lower leaves yellow and into cotton prior to defoliation.

Sow 60 days before heavy frost.

In northern regions, can also be planted in early spring to provide nitrogen to the primary crop planted in May or early June.

Adjust seeding rate based on goal: lower planting rates produce larger taproots; higher planting rates result in smaller taproots and more root surface area may help trap more nematodes and assist with soil-borne pest suppression.

Follow broadcast seeding with a light disking, cultipacking, or rolling. For best results, apply 35-70 lbs. of N/A at planting.

Winterkills at ~25°F

FEATURES & BENEFITS

Resistant to *M. chitwoodi* & *H. schachtii*

Suppresses soil-borne diseases

Bio-drilling reduces soil compaction

Potential to absorb over 100 lbs. per acre of previously trapped nitrogen

Emerges in as little as 3 days, full canopy in 3-4 weeks for weed management

Bio-mass production adds organic matter for building soil health

Early vigor and oil cover, late flowering, resists lodging

Tested Blackleg free



turfandnativeseed.com
4908 S. Hayford Rd.
Spokane, WA 99224

T: 800-268-0180
P: 509-835-4967
F: 509-835-4969

ATTACK WHITE MUSTARD

Sinapis alba

BIOFUMIGATION

Use as part of an integrated pest management plan (IPM). For maximum capture of glucosinolates, mow at flowering, till into soil, irrigate in absence of precipitation, and seal soil with roller.

Resistant to Nematodes: *Heterodera schachtii* (SBCN, sugar beet cyst nematode), *Meloidogyne chitwoodi* (Columbia root-knot nematode)

Non-Host to: *Globodera pallida* (PCN potato cyst nematode), *Heterodera avenae* (cereal cyst nematode), *Heterodera goettingiana* (pea cyst nematode), *Meloidogyne naasi* (barley root-knot nematode), *Ditylenchus destructor* (potato tuber nematode)

Supresses: *Verticillium* wilt, *Rhizoctonia* spp., *Pythium* spp., *Fusarium* spp., and *Sclerotinia* spp.

Seeding Rates (Lbs/A): Traditional Cover Cropping					
Early			Late		
drilled	broadcast	aerial	drilled	broadcast	aerial
6-10	12-15	14-26	10-12	15-18	18-20

Seeding Rates (Lbs/A): Nematode Targeted Seeding:					
Early			Late		
drilled	broadcast	aerial	drilled	broadcast	aerial
14-18	21-27	25-32	18-22	22-33	25-40



turfandnativeseed.com
4908 S. Hayford Rd.
Spokane, WA 99224

T: 800-268-0180
P: 509-835-4967
F: 509-835-4969