

1 OF 5
PM 23
45639-134

1 (30 ACRE PACKAGE)
Contains Three 10 Acre Packages

9-3249-1

LIVING FUNGAL SPORES
STORE AT TEMPERATURES OF 40° TO 80° F
AVOID STORAGE CONDITIONS OF
HIGH HUMIDITY AND MOISTURE

Collego™

SELECTIVE POSTEMERGENT HERBICIDE
BIOLOGICAL WEED CONTROL AGENT FOR
CONTROL OF NORTHERN JOINTVETCH (CHALKY INDIGO)
IN RICE AND SOYBEAN

ACTIVE INGREDIENT

Colletotrichum gloeosporioides f.sp.
aeschynomene ATCC 20358

15% w/w*

INERT INGREDIENTS

85% w/w

Total 100% w/w

*Contains at least 75.7 x 10¹⁰ viable fungal spores

Keep Out of Reach of Children

CAUTION-CAUCION

PRECAUCION AL USUARIO: Si usted no lee Inglés, no use este producto
hasta que la etiqueta le haya sido explicada ampliamente.

See Precautionary Statement on Side Panel

EPA Reg No 1023-63

EPA Est No 1023-MI-2

812 255 0037

USE BEFORE
LOT



Division of The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A

NOT REVIEWED
In Accordance with PR Notice 20-2
Based on Draft Labeling Data

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
See Booklet for complete directions for use

PRECAUTIONARY STATEMENT

HAZARD TO HUMANS AND DOMESTIC ANIMALS. Caution. Causes slight eye irritation. Avoid contact with eyes or clothing.
STATEMENT OF PRACTICAL TREATMENT. If In Eyes. Flush with plenty of water. Get medical attention if irritation persists. Wash thoroughly with soap and water after handling.
ENVIRONMENTAL HAZARDS. Do not apply directly to water except as indicated in the directions for use. Do not contaminate water, by cleaning of equipment or disposal of wastes.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.
STORAGE: Store Collego at temperatures between 40° and 80° F. Collego contains viable fungal spores. Germination of these spores will be reduced by temperatures below 32° F or when Collego is held for 12 hours or more at temperatures above 105° F. Store in original container and keep closed.
PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
CONTAINER DISPOSAL: Triple rinse plastic containers (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration or if allowed by State and local authorities by burning. If burned, stay out of smoke.
Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or if allowed by State and local authorities by burning. If burned, stay out of smoke.

IMPORTANT—READ BEFORE USE

By using this product, user accepts the following conditions, warranty disclaimer of warranty, and limitations of liability.
CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, because of extreme weather and soil conditions, manner of use and other factors beyond TUCO's control, it is impossible for TUCO to eliminate all risks associated with use of this product. As a result, crop injury or ineffectiveness is always possible.
WARRANTY AND DISCLAIMER OF WARRANTIES: TUCO warrants that this material conforms to the description and conditions on the label and is reasonably fit for use under the directions and conditions of this label. TUCO AND SELLER MAKE NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS, MERCHANTABILITY OR OTHERWISE.
LIMITATIONS OF LIABILITY: The liability of TUCO or Seller for damages arising from the use of this product is limited to the replacement cost of the product used and shall not include any consequential damages such as loss of profits or other values.
NO CHANGES AUTHORIZED: No one (other than an authorized Agent of TUCO) is authorized to make any other warranty, or change the above conditions, disclaimer or limitations, and then only if in writing and with specific reference to this label.

EPA 499
11704

TUCO

Collego™

Component A
FUNGAL SPORE REHYDRATING AGENT

Keep Out of Reach of Children

CAUTION-CAUCION

PRECAUCION AL USUARIO: Si usted no lee
inglés, no use este producto hasta que la
etiqueta le haya sido explicada
en español.

See side panel for
precautionary statements

USE BEFORE
LOT

EPA Est. No. 1023-Mt-2

NET VOLUME: 1 QUART

9-3245
No. 1023-Mt-2
Based on Draft

Office 10-2
ated

DIRECTIONS FOR USE

It is a violation of Federal law to use this
product in a manner inconsistent with its
labeling

See Booklet for complete directions for use

STORAGE AND DISPOSAL

Do not contaminate water, food or
feed by storage and disposal.

STORAGE: Store in original con-
tainer and keep closed. Store
Collego Component A at tempera-
tures of 40° to 80° F

PESTICIDE DISPOSAL: Wastes re-
sulting from the use of this product
may be disposed of on site or at an
approved waste disposal facility

CONTAINER DISPOSAL: Triple rinse
(or equivalent). Then offer for recycl-
ing or reconditioning, or puncture
and dispose of in a sanitary landfill,
or incineration, or if allowed by State
and local authorities, by burning. If
burned, stay out of smoke.

812 233 001 "

TUCO Division of The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A.

**BIOLOGICAL WEED CONTROL AGENT
FOR CONTROL OF NORTHERN JOINTVETCH (CURLY INDIGO)
IN RICE AND SOYBEAN**

ACTIVE INGREDIENT

Colletotrichum gloeosporioides f.sp.
aeschynomene ATCC 20358

INERT INGREDIENTS

1% w/w
99% w/w
Total 100% w/w

*Contains at least 75.7 x 10¹⁰ viable fungal spores.

**KEEP OUT OF REACH OF CHILDREN
CAUTION-CAUCION**

PRECAUTION AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

See Precautionary Statement on Back Panel

NET WEIGHT _____

EPA Reg No 1023-63

EPA Est No. 1023-MI-2

USE BEFORE
LOT

812 235 003

TUCO Division of The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A.

equipment or disposal of wastes.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal

STORAGE: Store College Component B at temperatures of 40° to 80° F. College Component B contains viable spores. Germination of these spores will be reduced by temperatures below 30° F or when College Component B is held for 12 hours or more at temperatures above 105° F. Store in original container and keep closed.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT--READ BEFORE USE

By using this product, user accepts the following conditions, warranty, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, because of extreme weather and soil conditions, manner of use and other factors beyond TUCO's control, it is impossible for TUCO to eliminate all risks associated with use of this product. As a result, crop injury or ineffectiveness is always possible.

WARRANTY AND DISCLAIMER OF WARRANTIES: TUCO warrants that this material conforms to the description and conditions on the label and is reasonably fit for use under the directions and conditions of this label. TUCO AND SELLER MAKE NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS, MERCHANTABILITY OR OTHERWISE.

LIMITATIONS OF LIABILITY: The liability of TUCO or Seller for damages arising from the use of this product is limited to the replacement cost of the product used and shall not include any consequential damages such as loss of profits or other values.

NO CHANGES AUTHORIZED: No one (other than an authorized Agent of TUCO) is authorized to make any other warranty, or change the above conditions, disclaimer or limitations, and then only if in writing and with specific reference to this label.

TUCO Division of The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A.

812 235 002

Collego is a two component product

—Component A: A fungal spore rehydrating agent.

—Component B

ACTIVE INGREDIENT

Colletotrichum gloeosporioides f. sp.
sech. nomense ATCC 20358

15% w/w

INERT INGREDIENTS

85% w/w

Total 100% w/w

*Contains at least 75.7×10^6 viable fungal spores

Keep Out of Reach of Children

CAUTION-CAUCION

PRECAUCION AL USUARIO: Si usted no lee inglés, no use este producto hasta que lo entienda en su idioma original.

PRECAUTIONARY STATEMENT*

HAZARD TO HUMANS AND DOMESTIC ANIMALS. Caution. Causes slight eye irritation. Avoid contact with eyes or clothing.

STATEMENT OF PRACTICAL TREATMENT if in Eyes: Flush with plenty of water. Get medical attention if irritation persists. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS. Do not apply directly to water except as indicated in the directions for use. Do not contaminate water by cleaning of equipment or disposal of wastes.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

GENERAL INFORMATION

Collego is a selective postemergent mycoherbicide which is a specific biological weed control agent. Postemergent applications of Collego will selectively control northern jointvetch (curly indigo) *Aeschynomene virginica* (L.) B.S. in rice (*Oryza sativa* L.) and soybean (*Glycine max* (L.) Merr.). To prevent seed production, Collego should be applied when northern jointvetch plants are 12 or more inches tall and have not reached the bloom stage. Collego will cause disease lesions that will completely encircle the stems of the northern jointvetch plants. The fungus primarily infects the stems of the weed but it also infects the petioles and leaflets.

Diseased plants become limp; they may collapse. Plants not killed by Collego are stunted, unthrifty, unable to compete with the rice or soybean and will not be able to seed. Death of northern jointvetch plants may not occur for five (5) weeks after application.

Collego is a two component product. Collego Component A consists of three 1-quart bottles containing a water soluble rehydrating agent that allows the spores to take up water prior to germination. Collego Component B consists of three bags containing a water-suspendible dried fungal spore formulation of *Colletotrichum gloeosporioides* f. sp. *sech. nomense* ATCC 20358. Both components are packaged in a 5 gallon plastic container with a lid and stirring paddle.

APPLICATION RATE

Collego Component A (1 quart) and Component B (1 bag) will treat 10 acres.

Acres to be Treated	Amount Required	
	Component A	Component B
10	1 quart	1 bag
20	2 quarts	2 bags
30	3 quarts	3 bags

RECOMMENDATIONS FOR CONTROL OF NORTHERN JOINTVETCH (CURLY INDIGO)

CROP*	WHEN TO APPLY COLLEGE	REMARKS
RICE	At any stage of rice growth if the northern jointvetch is at least 12 inches tall. Rice fields should be flooded before application.	To prevent northern jointvetch from setting seed, College must be applied prior to bloom. Application of College to northern jointvetch in bloom or post-bloom will not completely prevent seed development. Northern jointvetch usually begins to bloom at about the same time as rice heads are emerging from the boot or pods are forming on the lower nodes of soybean plants.
SOYBEAN	After the soybean plants begin to flower if the northern jointvetch is at least 12 inches tall. Soybean fields should be irrigated just prior to application.	

*College is exempt from the requirement of a tolerance for residues in or on rice and soybean when used according to these directions for use.

THRESHOLD

Apply College when free moisture is on northern jointvetch leaves or relative humidities are above 85% and air temperatures of approximately 80° F are expected for at least 12 hours immediately following application. These conditions, necessary for infection to develop, usually prevail in rice and soybean fields during the evening. Soybean fields should be irrigated just prior to application; rice fields should be flooded.

CAUTION: DO NOT APPLY College DURING PERIODS WHEN RICE AND SOYBEANS ARE UNDER STRESS FOR MOISTURE OR WHEN DRYING CONDITIONS ARE LIKELY TO OCCUR. DO NOT APPLY College TO NORTHERN JOINTVETCH PLANTS PREVIOUSLY TREATED WITH PHENOXY HERBICIDES. DO NOT APPLY FUNGICIDES FOR AT LEAST THREE WEEKS FOLLOWING College APPLICATION.

APPLICATION EQUIPMENT

Chemical pesticide residues that remain in the spray tank and boom may kill the live College spores. Therefore, prior to use of College, thoroughly clean the spray tank.

Be sure the sprayer has been calibrated to deliver proper spray

coverage with a uniform spray pattern as thorough coverage of the northern jointvetch leaves and stems with College is essential. Check frequently during application for output of desired gallonage. Use proper nozzle sizes and nozzle arrangements on the spray boom. Use 50-mesh or coarser screens in strainers, nozzles and section units. Clean nozzles and screens frequently. Wind may cause uneven coverage. Do not apply when wind velocity is greater than 10 miles per hour.

FILLING THE SPRAY TANK

Fill the spray tank one-half full with water, add the College spore suspension (see Spore Preparation below) to the tank and rinse the mixing container; finish filling the tank to the desired spray volume. Agitate the spores and water to maintain the spore suspension. For best results, maintain continuous agitation during spraying.

SPORE PREPARATION

College Component B, dried fungal spores, must be rehydrated just prior to use. The sequence of the steps that must be used in rehydrating the spores for 10 acres:

- Step 1 Pour the contents from the 1 quart container of College Component A into the 5 gallon mixing container
- Step 2 Completely fill the College Component A container with water and empty into mixing container
- Step 3 Repeat Step 2 (Final concentration is 1 part rehydrating solution and 2 parts water)
- Step 4 Vigorously stir until College Component A is completely dissolved
- Step 5 Add one bag Component B and stir with moong paddle until the spores are completely wet and suspended
- Step 6 The suspension of spores may then be added to the spray tank. Rinse the mixing container to remove all of the spore suspension
- Step 7 Dilute the spore suspension in the spray tank to the desired volume

found with the exception of special areas such as levees where ground applications are practical. See Application Equipment section for instructions for preparing the ground spray rig prior to use of College. Use a spray volume of at least 15 gallons of water per acre

CAUTION: DO NOT ALLOW SPRAY SUSPENSION TO REMAIN IN THE SPRAY TANK FOR MORE THAN 12 HOURS OR ALLOW THE SUSPENSION TO HEAT UP.

COMPATIBILITY

College contains live fungal spores; care must be exercised in the handling of the spores. College is not compatible with liquid nitrogen fertilizers, insecticides, fungicides, and herbicides such as MCP, 2,4-D, 2,4-DB, 2,4,5-T and malinate (Ordram®). Germination of the spores will be reduced if combined with these materials. College is compatible with acifluorfen (Blazer®).

CROP RESTRICTION

Feed, feed and forage crops may be sown in College treated fields immediately after harvest of rice or soybeans.

SPECIFIC PRECAUTIONS

After 7 days following application, the grower should frequently examine the northern jointvetch plants to determine if disease lesions are developing.

As with other pesticides, effectiveness of College may be reduced by mistakes in application, fertilization, cultivation and management practices. Results will be affected by extremes in weather, soil moisture and temperature.

If the disease lesions caused by College do not reach one-half (1/2) inch in diameter and do not encircle the stems of the northern jointvetch plants within 14 days after treatment, a second application of College should be made. See Application Rate and Recommendations Sections for College amounts and timing.

STORAGE AND DISPOSAL

Do not contaminate water, feed, or food by storage or disposal.

STORAGE: Store in original container and keep closed. Store College at temperatures of 40° F to 80° F. College contains viable fungal spores. Germination of these spores will be reduced by temperatures below 32° F or when College is held for 12 hours or more at temperatures above 105° F. Store in original container and keep closed.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State or local authorities by burning. If burned, stay out of smoke. Completely bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

SPRAY APPLICATION

For best results, College should be applied by aerial application with fixed-wing or helicopter aircraft. Use a spray volume of at least 10 gallons of water per acre.

Ground applications are not prohibited, however they may be impractical in most rice and soybean situations where northern jointvetch is