buying seed

not a leap of faith

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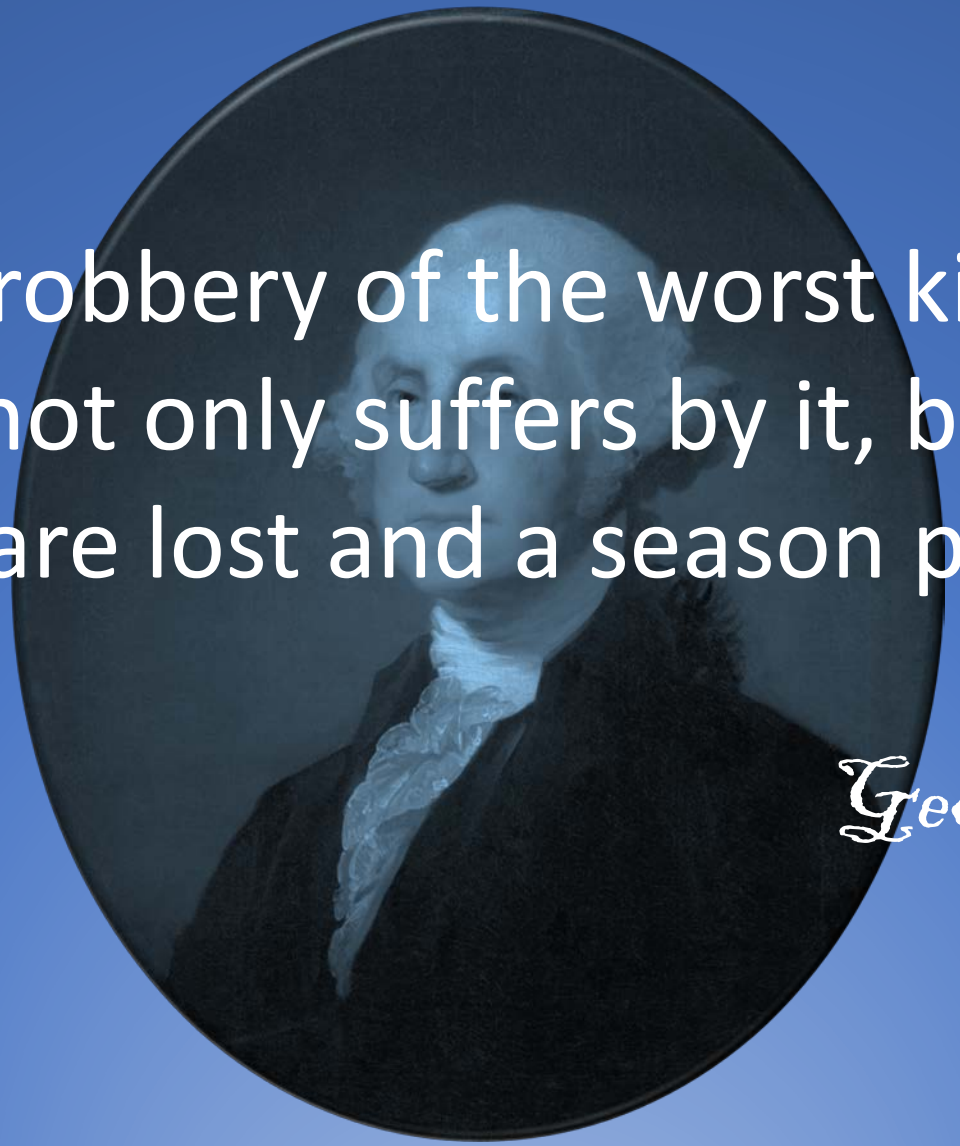

bad seed is a robbery of the worst kind: for your pocket-book not only suffers by it, but your preparations are lost and a season passes away unimproved.

George Washington

what are we looking for?

1. trueness to variety or species

splitbeard bluestem
Andropogon ternarius

broomsedge
Andropogon virginicus

what are we looking for?

1. trueness to variety or species
2. good germination

what are we looking for?

1. trueness to variety or species
2. good germination
3. purity

what are we looking for?

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2. good germination
3. purity
4. vigor

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2. good germination
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how do you know?

Indiangrass Americus

Lot # GAPMC2010-F23

83.29% **PURE SEED**

00.00% **OTHER CROP SEED**

16.71% **INERT MATTER**

00.00% **WEED SEED**

NOXIOUS WEED SEED: NONE FOUND

GERMINATION: 73%

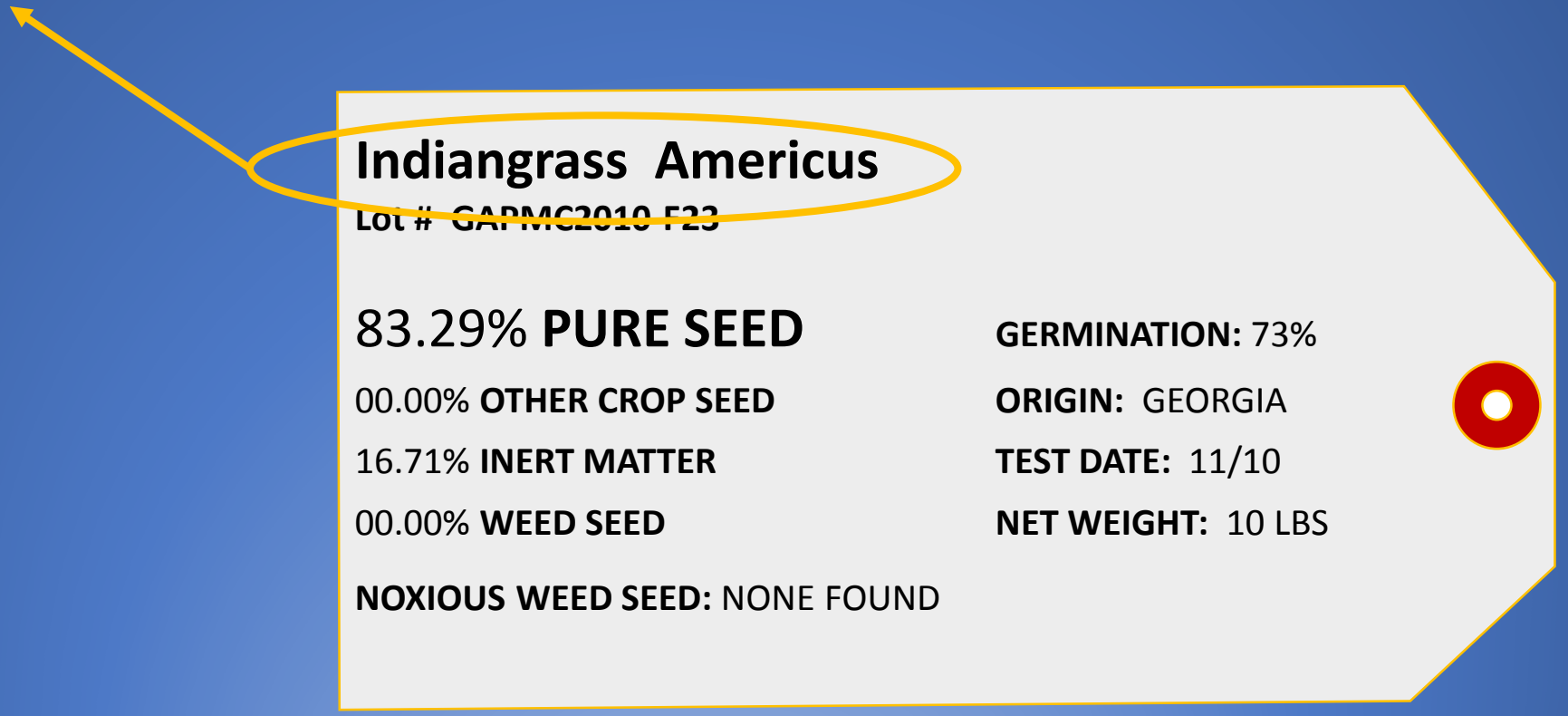
ORIGIN: GEORGIA

TEST DATE: 11/10

NET WEIGHT: 10 LBS

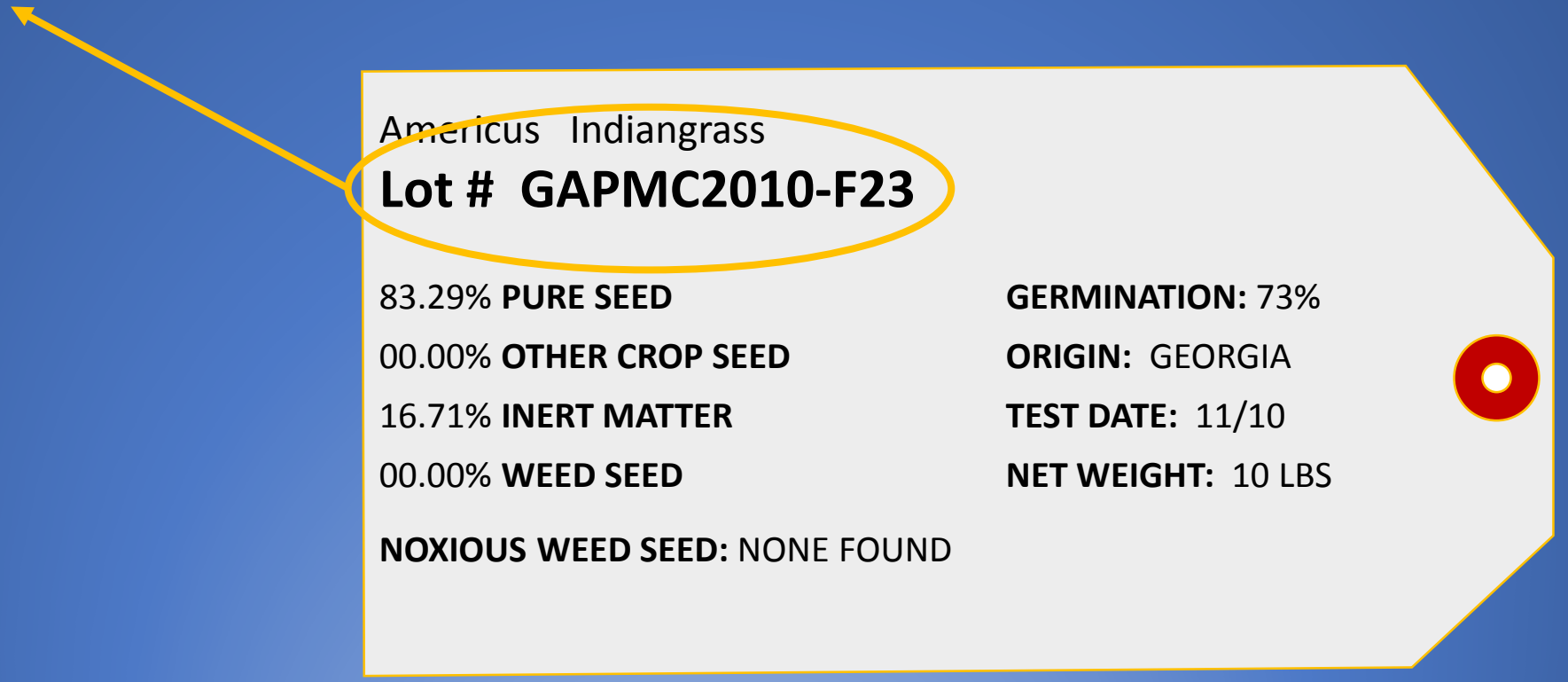
kind and variety

the amount of seed by weight that is the species or cultivar stated



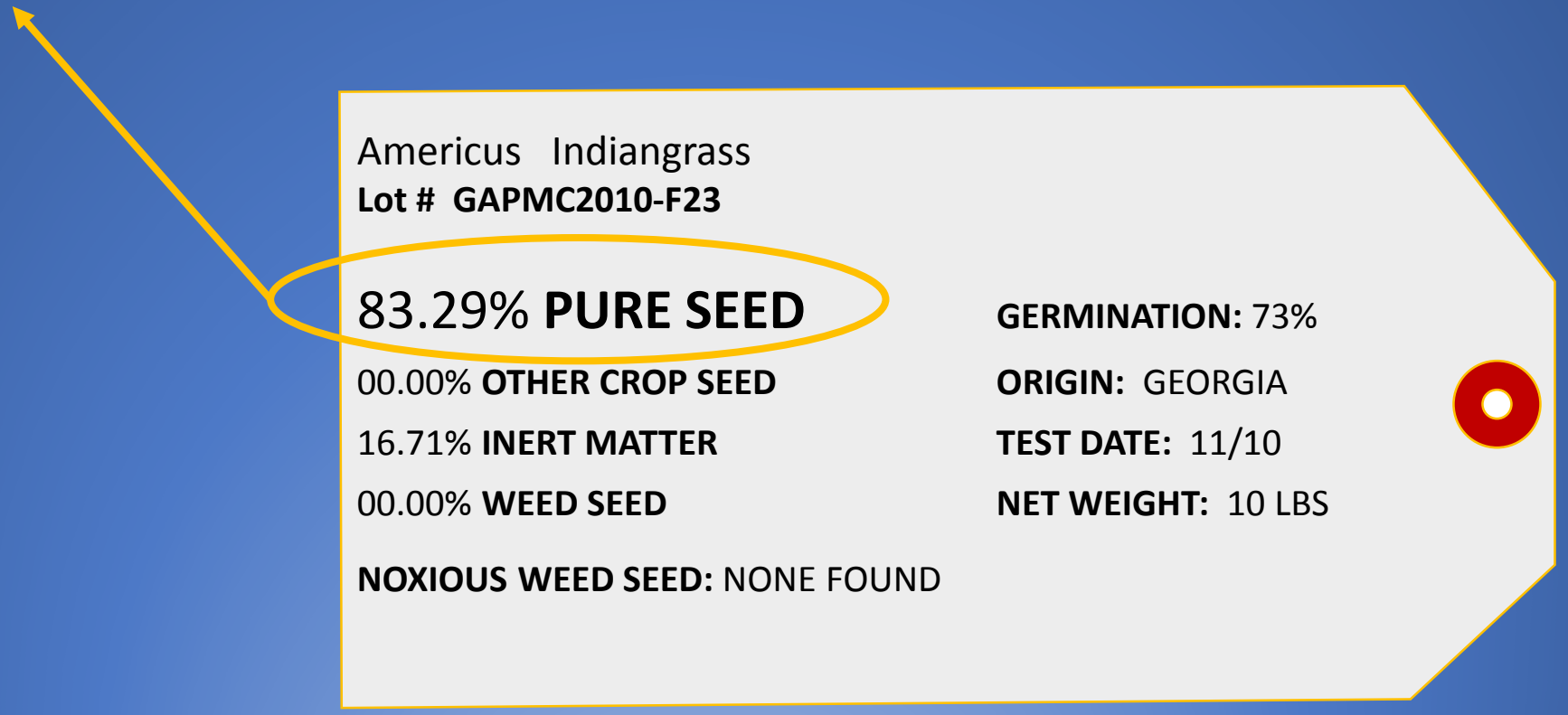
lot number

a unique number that allows a seed lot to be traced back to its origin.



purity

the amount of seed by weight that is the species or cultivar stated



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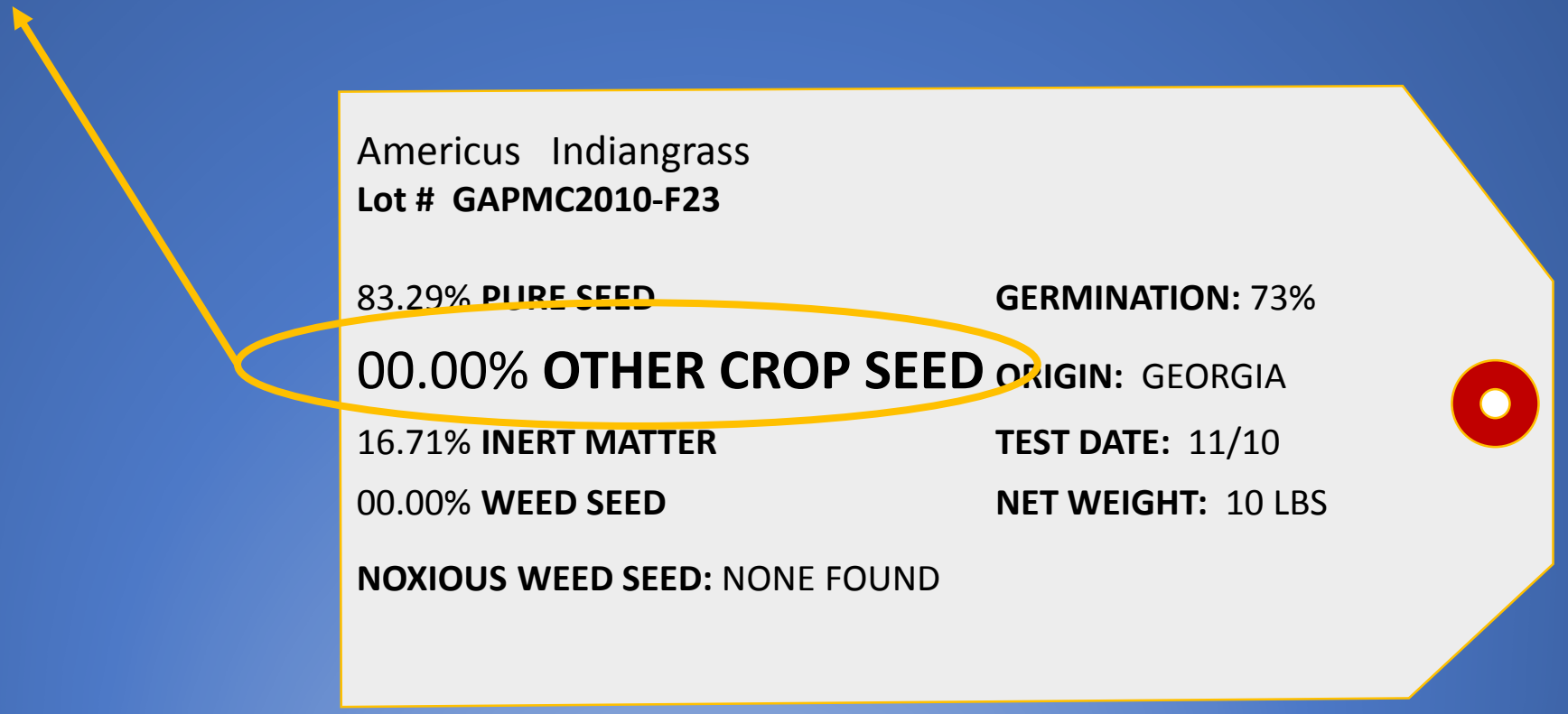
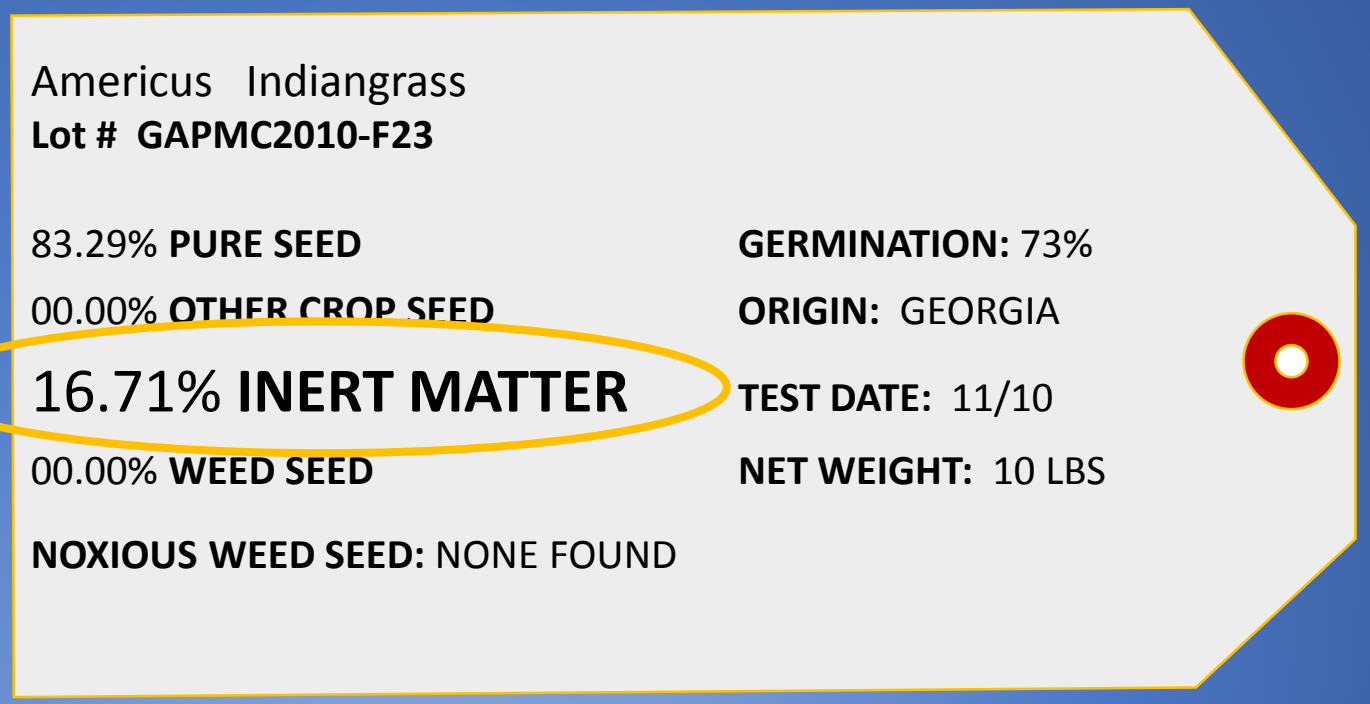


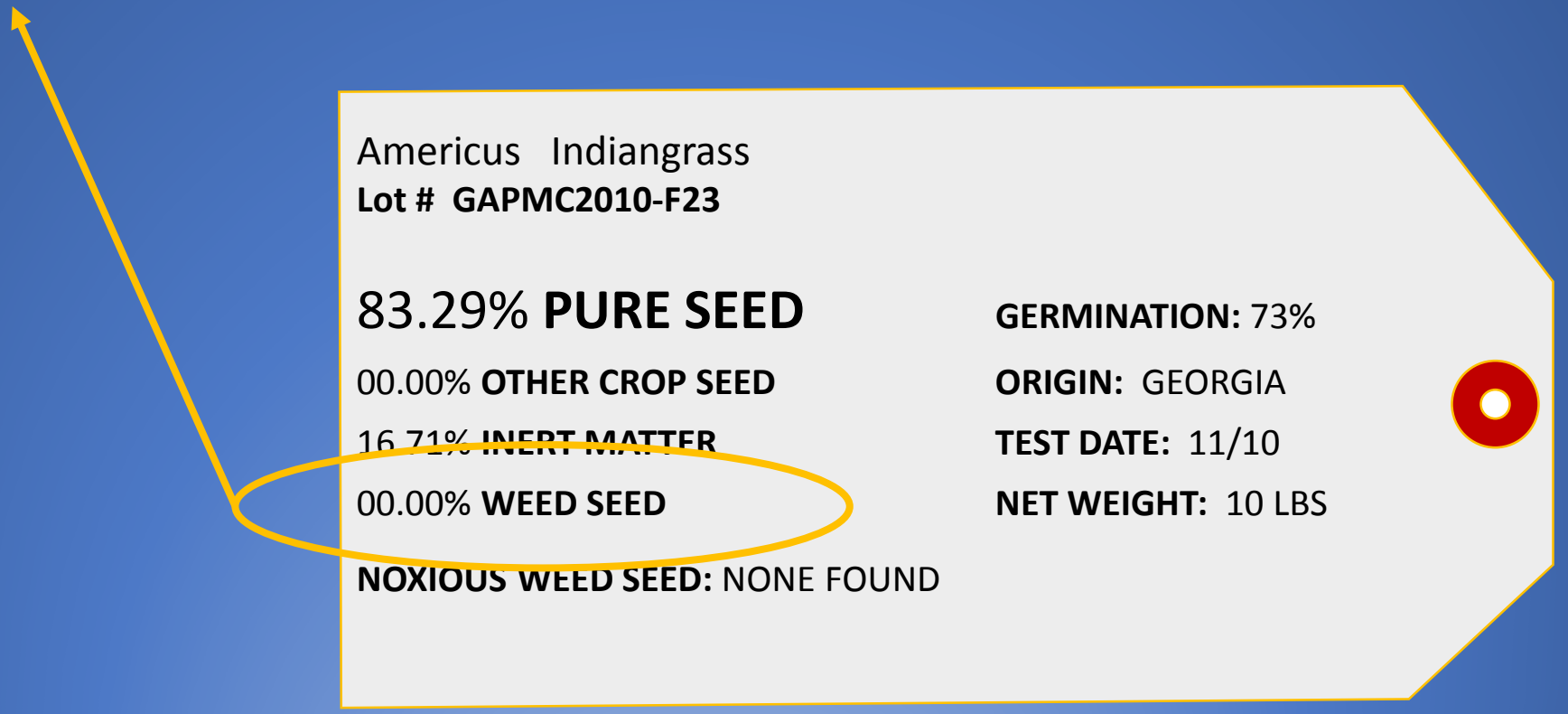
inert matter

All matter that is not seed



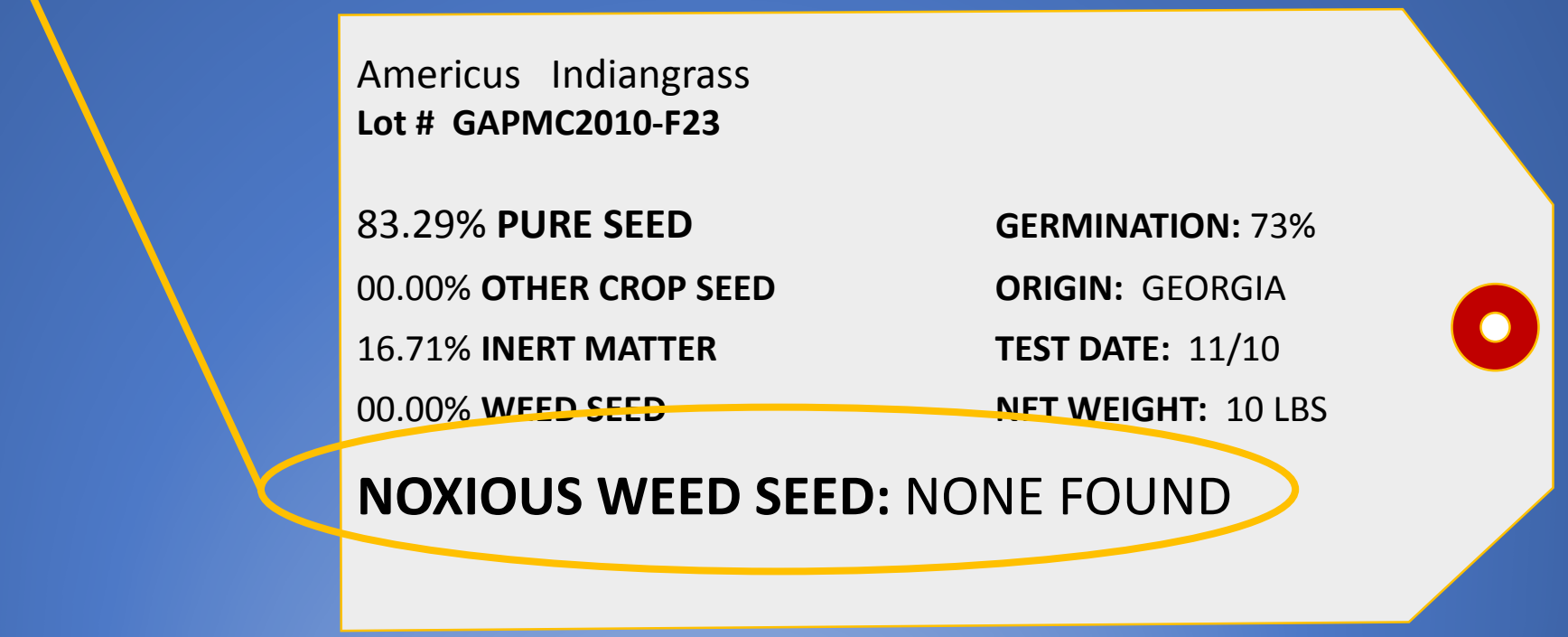
weed seed

Seed of all plants generally recognized as weeds in a state.



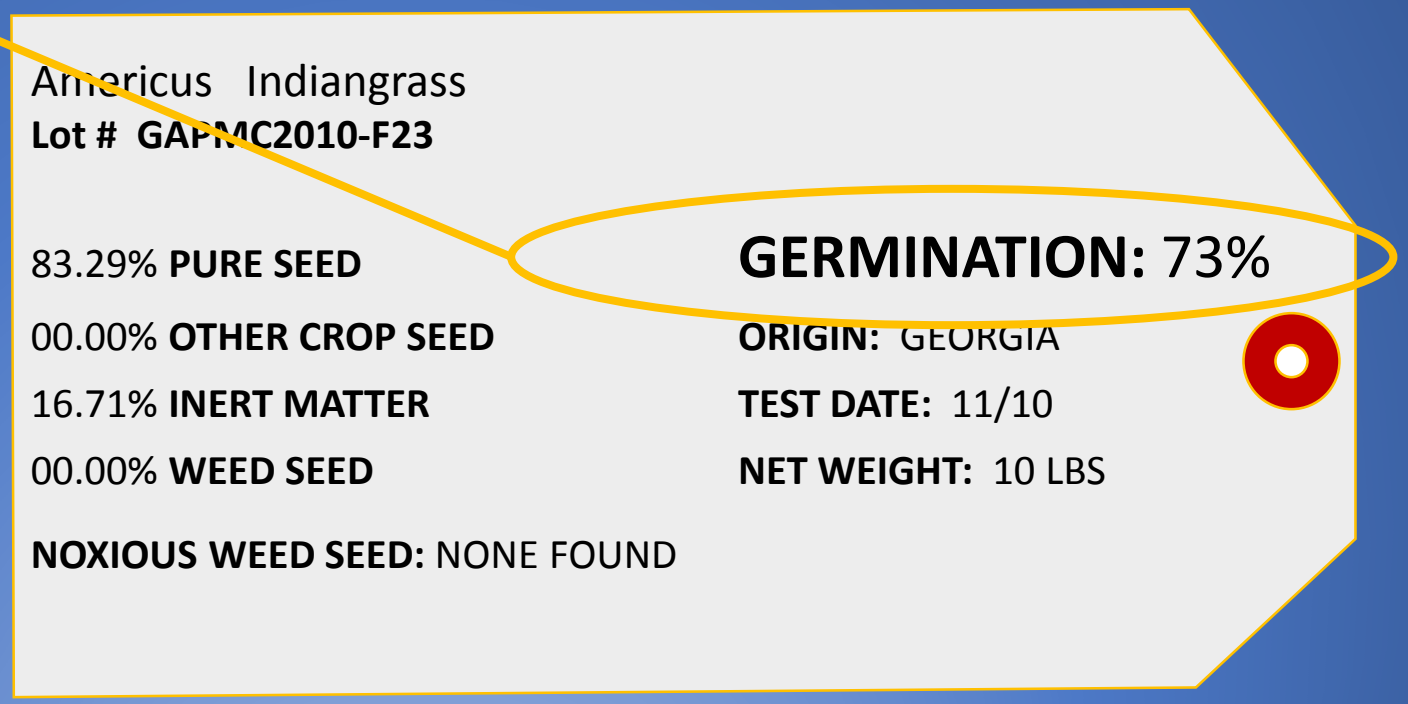
noxious weed seed

seed defined by a state to be a problem or prohibited



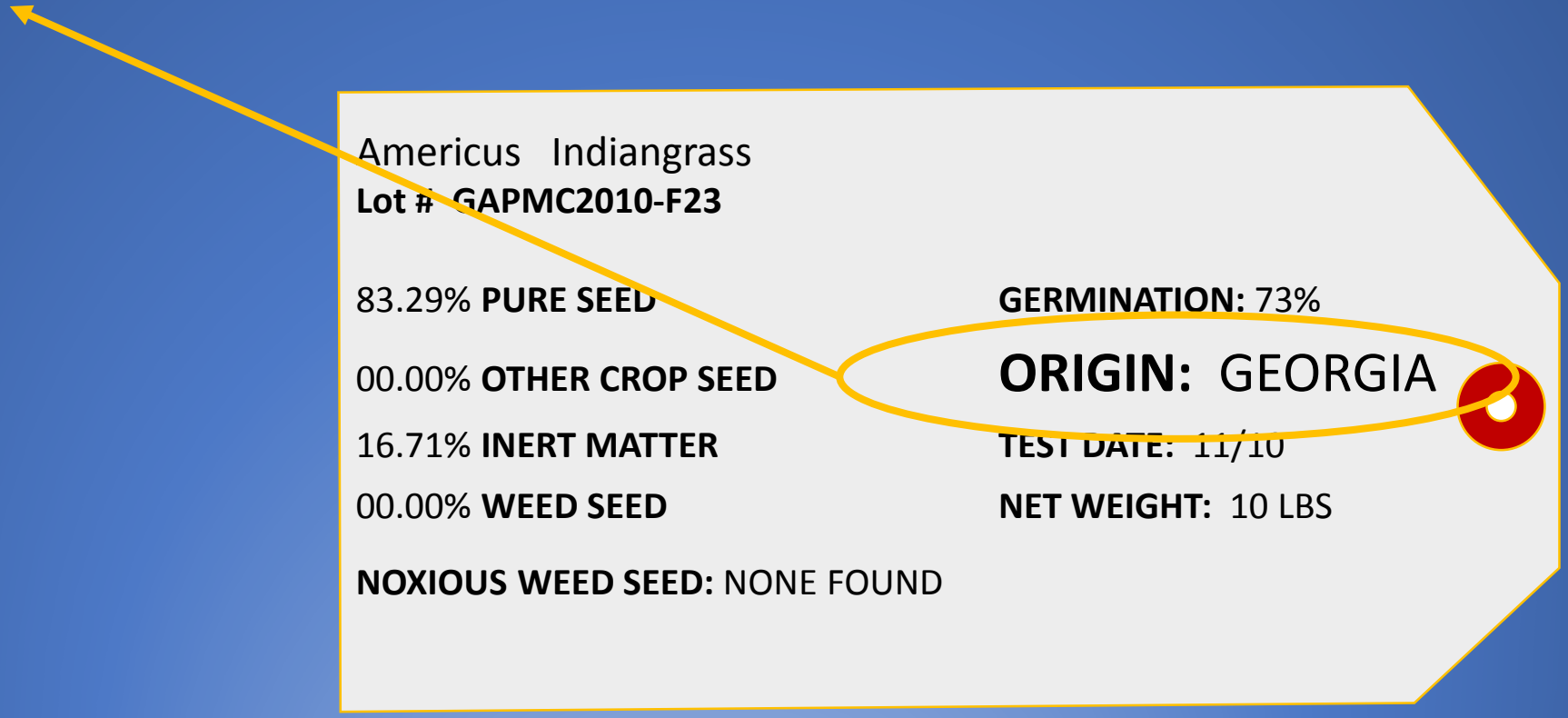
germination

the percentage of seed by weight in the bag that has the potential to germinate



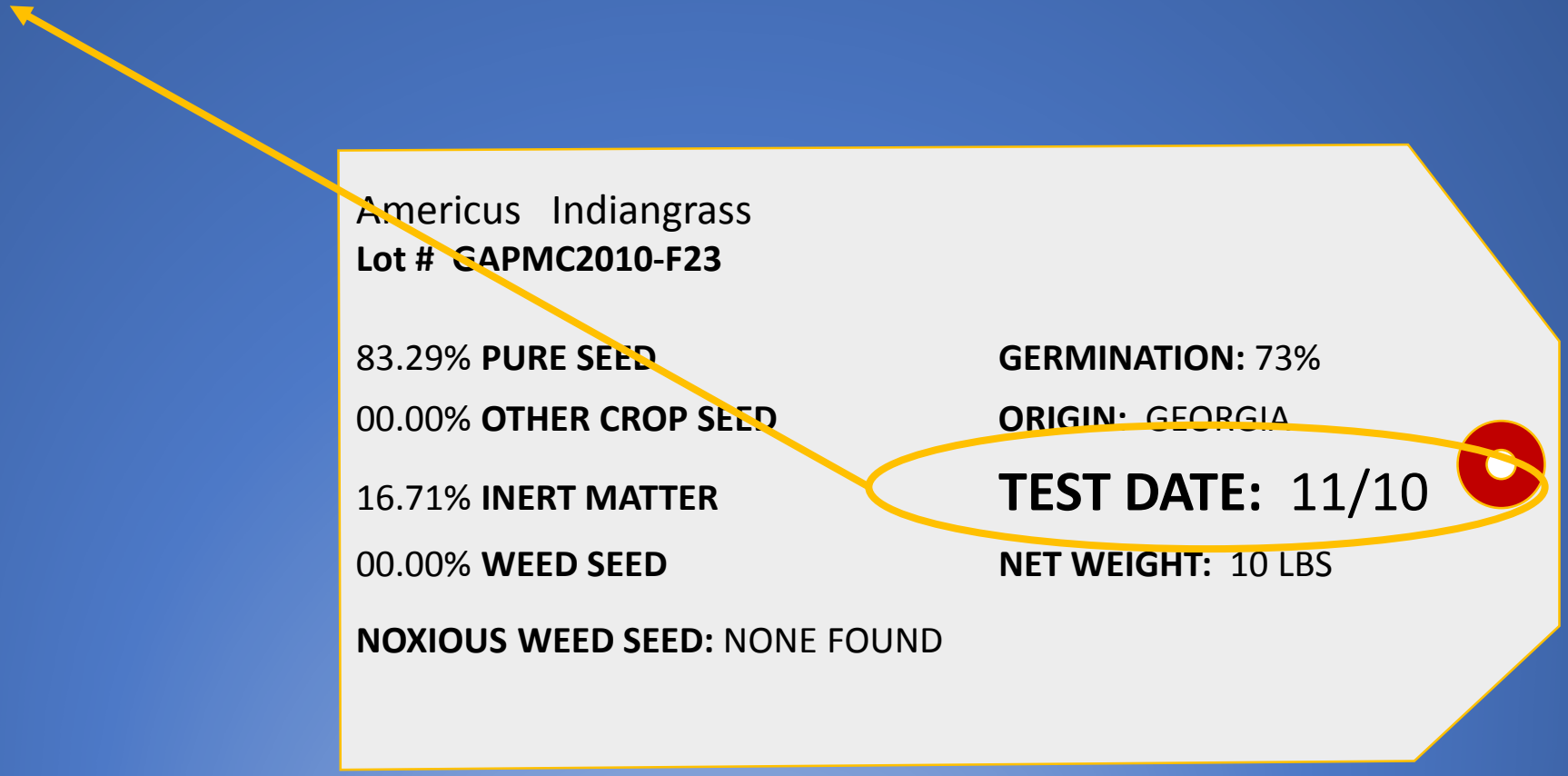
origin

The state in which the seed was grown



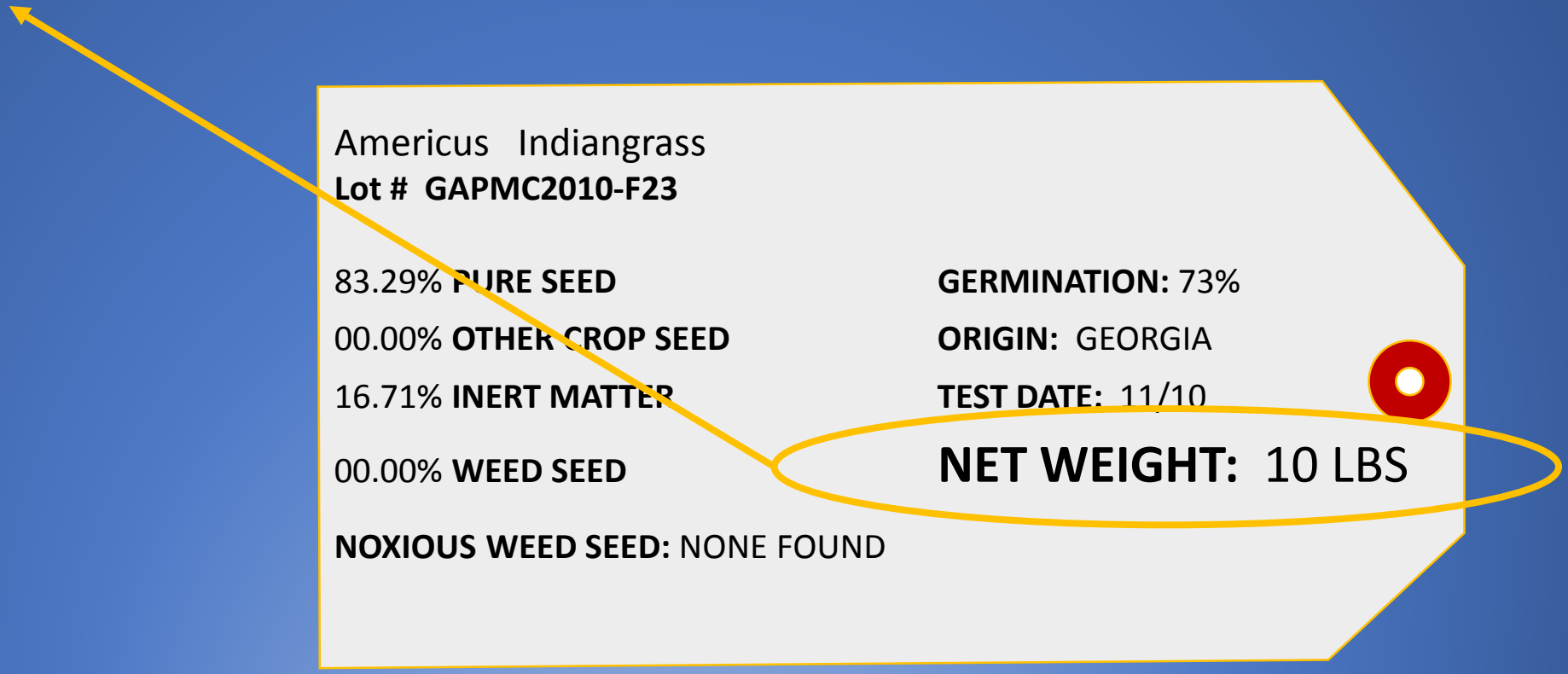
test date

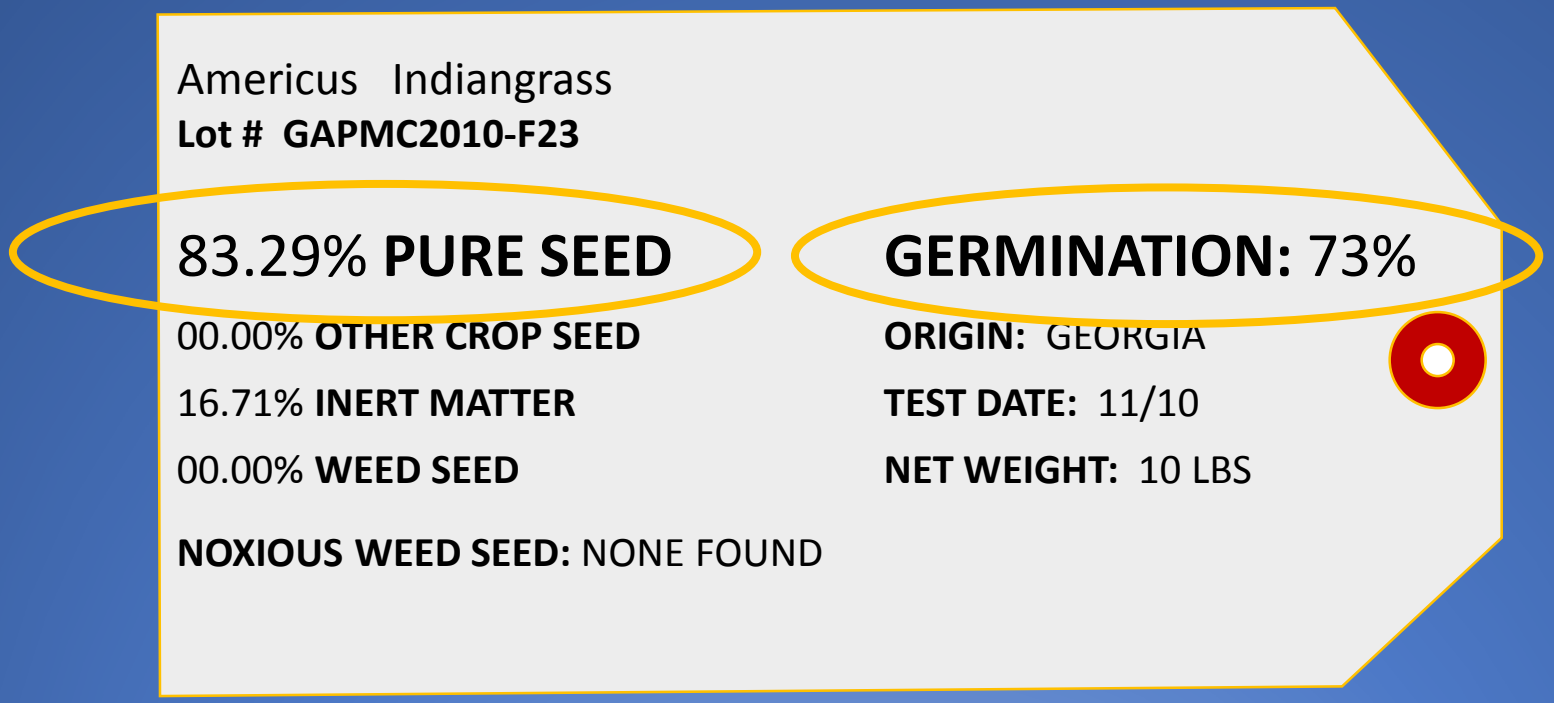
Date the seed testing was done



net weight

the net weight of material in the bag or container





Pure Live Seed (PLS)

% pure seed X % germination

83.29% X 73.00% = 61%

why is it important to use PLS for seeding rate calculation?

seeding rate for Indiangrass = 7 lbs/acre

PLS seeding rate = 12 lbs/acre

Seed per pound = 165,000

your actual seeding rate is 4 lbs less the recommended rate

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your actual seeding rate is 4 lbs less the recommended rate

or

660,000 seed in 1 acre

Say What!

AOSCA - Association of Official Seed Certifying Agencies

State Seed Certifying Agency
- Crop Improvement Association

classes of seed certification

- breeder – seed controlled by the originating plant breeding organization
- foundation – the progeny of breeder seed, managed for genetic purity and varietal identity
- registered – the progeny of foundation seed, managed for genetic purity and varietal identity
- certified – the progeny of registered seed, managed for specific genetic purity and varietal identity

certified class seed is grown for planting by the end user

what is required for producing certified class seed?

1. clean all planting, harvesting and storage equipment before using for certified seed

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5. test seed at a registered seed lab for germination and purity
6. properly label seed

What about non varieties?

prevarietal germplasm

AOSCA expansion to provide third-party inspection and labeling programs to specifically address the needs of the native seed and plant industry.

prevarietal germplasm categories

source identified class – unevaluated, identified only to species and location of wild growing parents

selected class – promise of desirable traits

Tested class – testing has proven desirable traits to be heritable

wildland collection certification requirements

1. certification application filed before harvest

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5. tagging of seed lot after compliance with requirements

field or nursery production requirements

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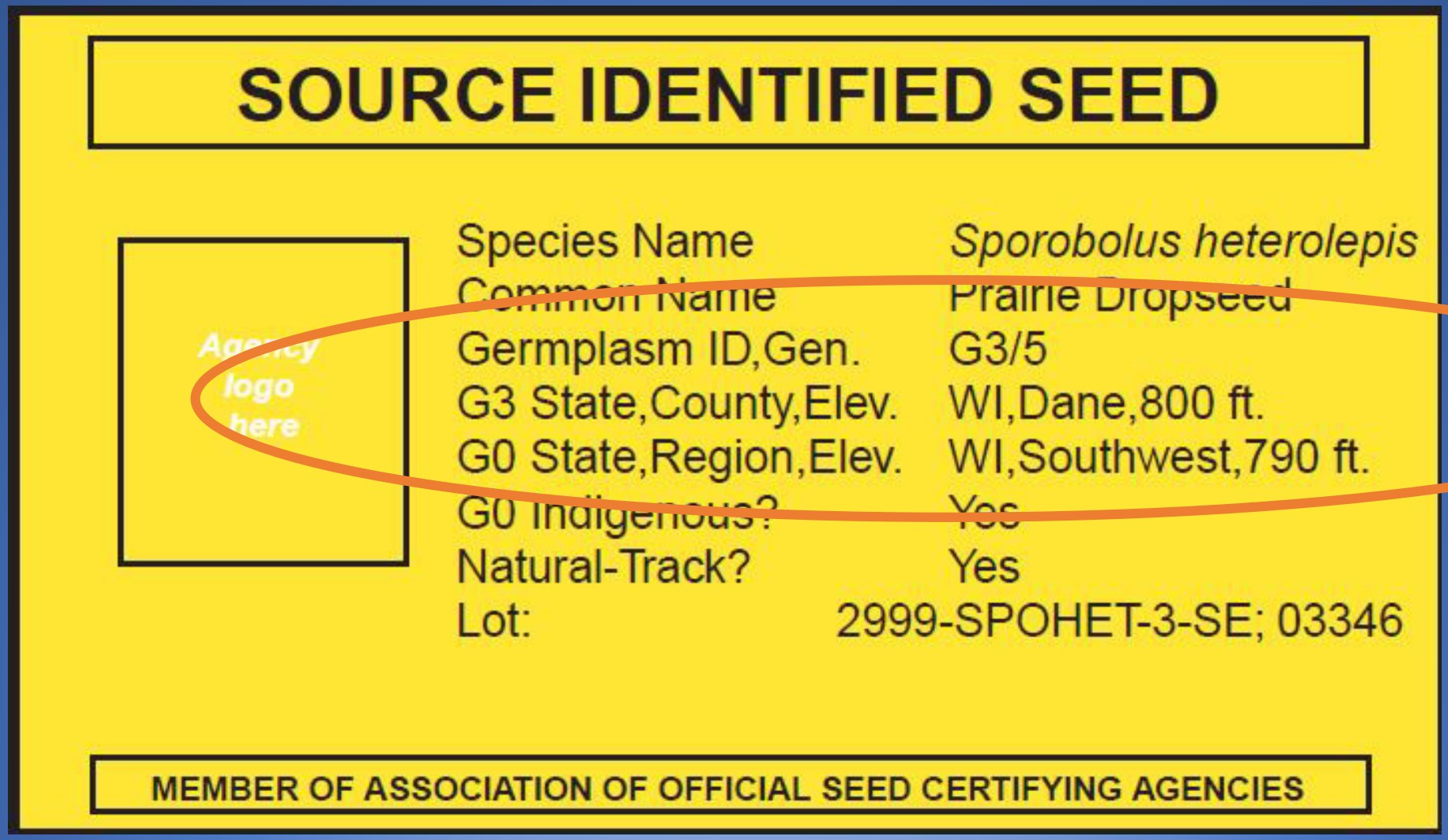
SOURCE IDENTIFIED SEED

Agency logo here

Species Name	*Sporobolus heterolepis*
Common Name	Prairie Dropseed
Germplasm ID,Gen.	G3/5
G3 State,County,Elev.	WI,Dane,800 ft.
G0 State,Region,Elev.	WI,Southwest,790 ft.
G0 Indigenous?	Yes
Natural-Track?	Yes
Lot:	2999-SPOHET-3-SE; 03346

MEMBER OF ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES



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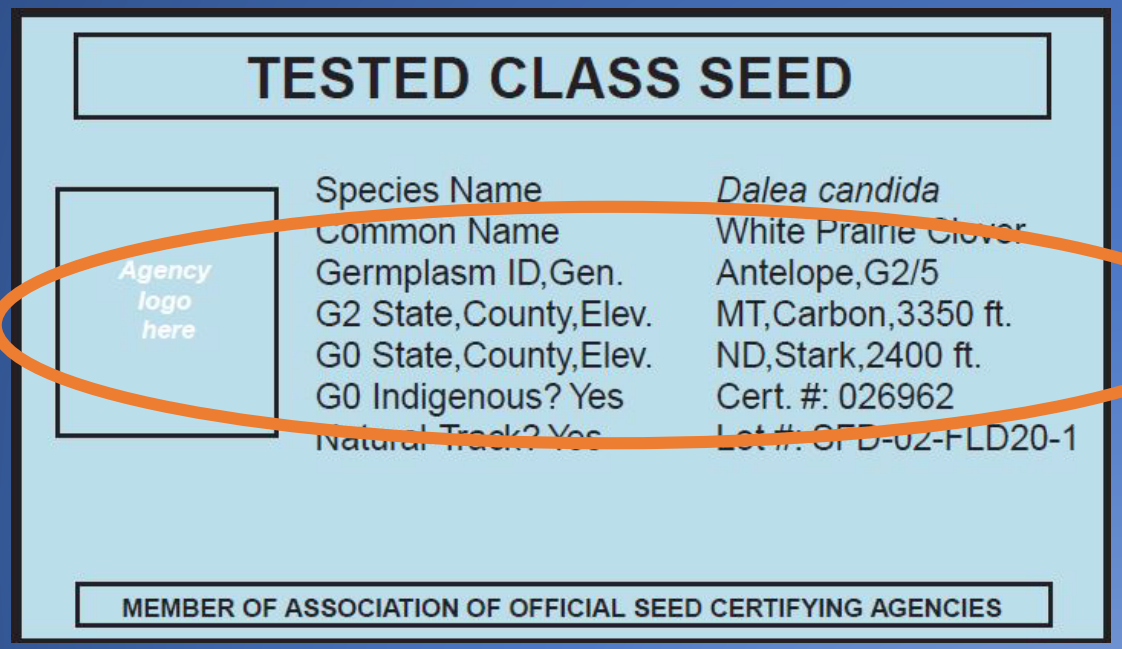
TESTED CLASS SEED
Agency logo here
Species Name
Common Name
Germplasm ID,Gen.
G2 State,County,Elev.
G0 State,County,Elev.
G0 Indigenous? Yes
Dalea candida
White Prairie Clover
Antelope,G2/5
MT,Carbon,3350 ft.
ND,Stark,2400 ft.
Cert. #: 026962
MEMBER OF ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

SELECTED CLASS SEED
Agency logo here
Common Name
Germplasm ID,Gen.
G2 State,County,Elev.
G0 State,County,Elev.
G0 Indigenous?
Natural-Track?
Cert. #:
Lot #:
Winterfat
Northern Cold Desert,G2/3
OR,Malheur,2300 ft.
ID,Bingham,4100 ft.
No
No
00497
KL203
MEMBER OF ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

Calculating your seeding rate!

Seed per square foot

origin	seeding rate (lb/acre)	seed/pound	seed sq ft
Americus	7	165,000	26
Greensboro, NC	7	120,000	19
Sparta, MS	7	225,000	36
Bishopville, SC	7	148,000	23

how many plants you want per square foot?

how many seed per pound?

how many seed per pound?

1. have seed count done by seed lab
2. count yourself – count ~10 lots of 1000 seed each, weigh and convert to seed/pound

origin	seeding rate (lb/acre)	seed/pound	seed sq ft
Americus	11	165,000	40
Greensboro, NC	15	120,000	40
Sparta, MS	8	225,000	40
Bishopville, SC	12	148,000	40

lbs/acre = (seed/ft^2 x ft^2/acre) / (seed/lb)

(40 seed/ft^2 x 43,560)/165,000 = 10.56 lb/acre

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