

```
# G 0 A B 8 5 2 > II  A 5 @ > A A 8 9 A : > 9 = 0 C G = > - ? @ 0 : B 8 G 5 A : > 9
:> = D 5 @ 5 = F 8 8 « : B C 0 ; L = K 5 2 > ? @ > A K M ? 8 4 5 < 8 > ; > 3 8 8
> A > 1 > > ? 0 A = K E, ? @ 8 @ > 4 = > - > G 0 3 > 2 K E 8 4 @ C 3 8 E 8 = D 5 : F 8 9 »
5 6 4 C = 0 @ > 4 = > 3 > < > ; > 4 Q 6 = > 3 > D > @ C < 0 « 5 4 5 ; O
= 0 C : 8 2 0 2 3 »
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admin, Wednesday 22 November 2023 - 08:00:58

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15 = > O 1 @ O 2 0 2 3 3. 2 @ 0 < : 0 E < 5 @ > ? @ 8 O B 8 9 5 6 2 5 4 > < A B 2 5 == > 3 >
= 0 C G = > - > 1 @ 0 7 > 2 0 B 5 ; L = > 3 > : > = A > @ F 8 C < 0 (= 0 ? @ 0 2 ; 5 = 8 5
« (: > ; 0 < > ; > 4 > 3 > < 8 : @ > 1 8 > ; > 3 0 ») < > ; > 4 K 5 C G Q = K 5
8 = A B 8 B C B 0 ? @ 8 = O ; 8 C G 0 A B 8 5 2 > @ 3 0 = 8 7 0 F 8 8 8 @ 0 1 > B 5 II
A 5 @ > A A 8 9 A : > 9 = 0 C G = > - ? @ 0 : B 8 G 5 A : > 9 : > = D 5 @ 5 = F 8 8
« : B C 0 ; L = K 5 2 > ? @ > A K M ? 8 4 5 < 8 > ; > 3 8 8 > A > 1 > > ? 0 A = K E,
? @ 8 @ > 4 = > - > G 0 3 > 2 K E 8 4 @ C 3 8 E 8 = D 5 : F 8 9 »
5 6 4 C = 0 @ > 4 = > 3 > < > ; > 4 Q 6 = > 3 > D > @ C < 0 « 5 4 5 ; O = 0 C : 8
2 0 2 3 » , ? @ > 2 > 4 8 < > 3 > 1 4 1 7 = > O 1 @ O = 0 1 0 7 5 ! B 0 2 @ > ? > ; L A : > 3 >
3 > A C 4 0 @ A B 2 5 == > 3 > < 5 4 8 F 8 = A : > 3 > C = 8 2 5 @ A 8 B 5 B 0.
! > @ 3 0 = 8 7 0 B > @ > < : > = D 5 @ 5 = F 8 8 2 K A B C ? 8 ;
! B 0 2 @ > ? > ; L A : 8 9 ? @ > B 8 2 > G C < = K 9 8 = A B 8 B C B
> A ? > B @ 5 1 = 0 4 7 > @ 0.
```

```
@ 0 1 > B 5 < 5 @ > ? @ 8 O B 8 O 2 A < 5 H 0 == > < D > @ < 0 B 5 ? @ 8 = O ; 8
C G 0 A B 8 5 1 > ; 5 5 5 0 < > ; > 4 K E C G Q = K E 8 A ? 5 F 8 0 ; 8 A B > 2, 2 B > <
G 8 A ; 5 < > ; > 4 K 5 C G Q = K 5 8 7 $ # - 8 <. 0 1 @ 8 G 5 2 A : > 3 >
(3. > A : 2 0), $ # > ; 3 > 3 @ 0 4 A : > 3 > ? @ > B 8 2 > G C < = > 3 >
8 = A B 8 B C B 0 > A ? > B @ 5 1 = 0 4 7 > @ 0 (3. > ; 3 > 3 @ 0 4), $ #
> A B > 2 A : > 3 > - = C ? @ > B 8 2 > G C < = > 3 > 8 = A B 8 B C B 0
> A ? > B @ 5 1 = 0 4 7 > @ 0 (3. > A B > 2 - = C), $ # > A B > 2
< 8 : @ > 1 8 > ; > 3 8 8 8 ? 0 @ 0 7 8 B > ; > 3 8 8 > A ? > B @ 5 1 = 0 4 7 > @ 0 (3.
> A B > 2 - = C), $ # @ : C B A : > 3 > ? @ > B 8 2 > G C < = > 3 >
8 = A B 8 B C B 0 > A ? > B @ 5 1 = 0 4 7 > @ 0 (3. @ : C B A : ), 0 B 0 : 6 5 1 C 4 C 1 8 5
A ? 5 F 8 0 ; 8 A B K : ; 8 = 8 G 5 A : 8 5 > @ 4 8 = 0 B > @ K 8 A B C 4 5 = B K
A B 0 @ H 8 E : C @ A > 2 ! B 0 2 @ > ? > ; L A : > 3 > 3 > A C 4 0 @ A B 2 5 == > 3 >
< 5 4 8 F 8 = A : > 3 > C = 8 2 5 @ A 8 B 5 B 0. ! > 3 ; 0 A => ? > 2 5 A B : 5 4 = O = 0
```

:>=D 5 @ 5=F 8 8 1 K; 8 @ 0 A A <> B @ 5=K 8 >1 A C 6 4 5=K 1 7 =0 C G=K E
4 >; 0 4 > 2, ?>A 2 O I Q ==K E 2 >? @>A 0 < A > 2 5 @ H 5=A B 2 > 2 0 =8 O
<5 B>4 > 2 ; 0 1 > @ 0 B > @ = > 9 4 8 0 3 => A B 8 : 8 > A > 1 > > ? 0 A = K E
? @ 8 @ > 4 = >-> G 0 3 > 2 K E 8 4 @ C 3 8 E 8 = D 5 : F 8 9, 8 7 C G 5 = 8 N 8 E
2 > 7 1 C 4 8 B 5 ; 5 9 8 ? @ 8 < 5 = 5 = 8 N A > 2 @ 5 < 5 == K E
8 = D > @ < 0 F 8 > == K E B 5 E =>; > 3 8 9 4 ; O
M ? 8 7 >> B > ; > 3 >- M ? 8 4 5 < 8 > ; > 3 8 G 5 A : > 3 > <>= 8 B > @ 8 = 3 0.
' ; 5 = K 6 N @ 8 < 5 @ > ? @ 8 0 B 8 O > B < 5 B 8 ; 8 2 K A > : C N
0 : B C 0 ; L=> A B L = 0 ? @ 0 2 ; 5 = 8 9 ? @ 5 4 A B 0 2 ; 5 == K E @ 0 1 > B 4 ; O
@ 5 3 8 > == 2 > A A 8 8. 0 B 5 @ 8 0 ; K 4 >; 0 4 > 2 2 K 7 2 0 ; 8 6 8 2 > 9
8 = B 5 @ 5 A 8 4 8 A : C A A 8 N A @ 5 4 8 C G 0 A B = 8 : > 2 : >= D 5 @ 5 = F 8 8 ?>
2 > ? @ > A 0 < = 0 C G = K E 8 A A ; 5 4 > 2 0 = 8 9, ? @ > 2 > 4 8 < K E
<>; > 4 K < 8 < 8 : @ > 1 8 >; > 3 0 < 8. > ; > 4 K < 8 C G Q = K < 8
8 = A B 8 B C B 0 1 K ; 8 ? @ 5 4 A B 0 2 ; 5 = K 6 4 >; 0 4 > 2: - « F 5 = : 0
2 8 @ C ; 5 = B => A B 8 H B 0 <> 2 2 8 @ C A 0 @ K < A : > 9- > = 3 >
3 5 <> @ @ 0 3 8 G 5 A : > 9 ; 8 E > @ 0 4 : 8 4 ; O => 2 > @ > 6 4 5 == K E 1 5 ; K E
< K H 5 9 ». >; 0 4 G 8: " : 0 G 5 = : > 0 B 0 ; L O ; 5 3 > 2 = 0, <; 0 4 H 8 9
= 0 C G = K 9 A > B @ C 4 = 8 : ; 0 1 > @ 0 B > @ 8 8 4 8 0 3 => A B 8 : 8 2 8 @ C A = K E
8 = D 5 : F 8 9; - « >; 5 : C ; O @ = >- 3 5 = 5 B 8 G 5 A : 8 9 <>= 8 B > @ 8 = 3
2 > 7 1 C 4 8 B 5 ; O ; 8 E > @ 0 4 : 8 C, F 8 @ : C ; 8 @ C N 1 5 3 > = 0
B 5 @ @ 8 B > @ 8 8 ! B 0 2 @ > ? >; L A > 3 > : @ 0 O ». >; 0 4 G 8: ! 8 @ 8 F 0
. ; 8 O ; 0 4 8 < 8 @ > 2 = 0, <; 0 4 H 8 9 = 0 C G = K 9 A > B @ C 4 = 8:
; 0 1 > @ 0 B > @ 8 8 4 8 0 3 => A B 8 : 8 1 0 : B 5 @ 8 0 ; L = K E 8 = D 5 : F 8 9; -
« F 5 = : 0 in vitro 0 4 J N 2 0 = B => 3 > 4 5 9 A B 2 8 O C P G >; 8 3 > = C : ; 5 > B 8 4 > 2
A : 2 0 4 @ C ? ; 5 : A = K < 8 A B @ C : B C @ 0 < 8 ». >; 0 4 G 8: 8 @ > 2
= 4 @ 5 9 8 E 0 9 ; > 2 8 G = 0 C G = K 9 A > B @ C 4 = 8 : ; 0 1 > @ 0 B > @ 8 8
1 8 > E 8 < 8 8; - « ! @ 0 2 = 8 B 5 ; L = K 9 0 = 0 ; 8 7 3 5 => <> 2 H B 0 <> 2
Bacillus anthracis, F 8 @ : C ; 8 @ C N 1 8 E = 0 B 5 @ @ 8 B > @ 8 8 > @ > = 5 6 A : > 9
> 1 ; 0 A B 8, 2 K 4 5 ; 5 == K E 2 @ 0 7 = K 9 ? 5 @ 8 > 4 2 @ 5 < 5 = 8 ».
>; 0 4 G 8: > 1 @ K H 5 2 0 ; L 3 0 8 : B > @ > 2 = 0, <; 0 4 H 8 9
= 0 C G = K 9 A > B @ C 4 = 8 : ; 0 1 > @ 0 B > @ 8 8 1 8 > E 8 < 8 8; - « 5 = > < = > 5
? @ > D 8 ; 8 @ > 2 0 = 8 5 H B 0 <> 2 1 @ C F 5 ; ; 2 K 4 5 ; 5 == K E = 0
B 5 @ @ 8 B > @ 8 8 5 2 @ > ? 5 9 A : > 9 G 0 A B 8 > A A 8 9 A : > 9 \$ 5 4 5 @ 0 F 8 8 ».
>; 0 4 G 8: % 0 G 0 B C @ > 2 0 == 0 = 4 @ 5 5 2 = 0, 1 8 >; > 3
; 0 1 > @ 0 B > @ 8 8 1 @ C F 5 ; ; Q 7 0 ; - « = B 5 3 @ 0 F 8 O
< 0 A A - A ? 5 : B @ > < 5 B @ 8 G 5 A : 8 E < 5 B > 4 > 2 8 A A ; 5 4 > 2 0 = 8 O 2
A 8 A B 5 < C ; 0 1 > @ 0 B > @ = > 9 4 8 0 3 => A B 8 : 8 A 8 1 8 @ A : > 9 O 7 2 K ».
>; 0 4 G 8: 0 ; 8 = 8 = ; 5 : A 0 = 4 @ 0 A 8 ; L 5 2 8 G, 1 8 >; > 3
; 0 1 > @ 0 B > @ 8 8 ? > A B 3 5 => < = K E B 5 E =>; > 3 8 9. >

@ 5 7 C ; L B 0 B 0 < :> = : C @ A 0 = 0 C G = K E @ 0 1 > B ? @ 8 7 Q @ 0 < 8 A B 0 ; 8
<>; > 4 K 5 C G Q = K 5 8 = A B 8 B C B 0: 8 @ > 2 = 4 @ 5 9 8 E 0 9 ; > 2 8 G (II
< 5 A B >), 0 ; 8 = 8 = ; 5 : A 0 = 4 @ 0 A 8 ; L 5 2 8 G (II < 5 A B >) 8 ! 8 @ 8 F 0
. ; 8 O ; 0 4 8 < 8 @ > 2 = 0 (III < 5 A B >). 0 0 : B 8 2 => 5 C G 0 A B 8 5 2 @ 0 1 > B 5
D > @ C < 0 8 ? ; > 4 > B 2 > @ = > 5 A > B @ C 4 = 8 G 5 A B 2 > 2 0 4 @ 5 A
8 = A B 8 B C B 0 ? > A B C ? 8 ; > 1 ; 0 3 > 4 0 @ A B 2 5 ==> 5 ? 8 A L <> > B
@ C : > 2 > 4 A B 2 0 ! B 0 2 @ > ? > ; L A : > 3 > 3 > A C 4 0 @ A B 2 5 ==> 3 >
< 5 4 8 F 8 = A : > 3 > C = 8 2 5 @ A 8 B 5 B 0.