

" 0 3 5 B 5 A, \$ C = 4 0, " C @ B 0 - Tagetes (G 0 A B II)

gradinar, ? > = 5 4 5 ; = 8 : 27 N ; 8 2009 - 13:40:53

Tagetes 5 = 5 ? @ 5 B 5 = F 8 > 7 5 =, 1 J @ 7 > @ 0 7 2 8 2 0 I A 5, A 2 5 B ; > 8
B > ? ; > ; N 1 8 2 8, A C H 0 - C A B > 9 G 8 2 > @ 0 A B 5 = 8 5. ? B 8 < 0 ; = 0
B 5 < ? 5 @ 0 B C @ 0 7 0 @ 0 7 2 8 B 8 5 = 0 < ; 0 4 8 B 5 @ 0 A B 5 = 8 O 1 8 - 2 0 ° C. @ 8
B 5 < ? 5 @ 0 B C @ 8 ? > 4 1 0 ° C ; 8 A B 0 B 0 ? 0 4 0 B 8 @ 0 A B 5 6 0 A ? 8 @ 0. > 4 - 1 ... -
2 ° C @ 0 A B 5 = 8 O B 0 C < 8 @ 0 B.

5 A B > ? > ; > 6 5 = 8 5: = 5 A 5 = C 6 4 0 O B > B A 8 ; = 0 A ; J = G 5 2 0
A 2 5 B ; 8 = 0, 2 J ? @ 5 : 8 G 5 7 0 < 0 : A 8 < 0 ; 5 = F J D B 5 6 8 < 5 = C 6 = 0
? @ O : 0 A ; J = G 5 2 0 A 2 5 B ; 8 = 0. " > 2 0 5 > A > 1 5 => 2 0 @ = > 7 0 Tagetes
tenuifolia. ! ; 0 1 > F J D B O B ? @ 5 7 ? @ > ; 5 B B 0 8 5 A 5 = B 0.

> G 2 0: > G 2 0 B 0 B @ O 1 2 0 4 0 5 1 > 3 0 B 0 = 0 E @ 0 = 8 B 5 ; = 8
2 5 1 5 A B 2 0, 8 ; 8 A 5 ? > 4 E @ 0 = 2 0 ? @ 5 4 8 7 0 A 0 6 4 0 = 5 B >, 4 > 1 @ 5 5
4 0 A 5 ? > ; 8 2 0 B ? > - 1 8 ; = > ? @ 5 7 ? J @ 2 0 B 0 ? > ; > 2 8 = 0 = 0
; O B > B > .

@ 8 6 8: ! C E > C A B > 9 G 8 2 8 A 0, => 2 = 0 G 0 ; > B > = 0 @ 0 A B 5 6 0, A 5
= C 6 4 0 O B > B ? > ; 8 2 0 = 5, 2 ? @ > B 8 2 5 = A ; C G 0 9 @ 0 A B 5 = 8 O B 0 1 5 A 0
A ; 0 1 8, 0 A J F 2 5 B 8 O B 0 - < 0 : 8. Tagetes erecta = 5 ? > = 0 A O 8 7 > 1 8 ; 8 5 B >
= 0 2 ; 0 3 0 2 ? > G 2 0 B 0. @ 8 4 J 6 4 > 2 = > 2 @ 5 < 5, B 5 E = 8 B 5
< = > 3 > 1 @ > 9 = 8 A J F 2 5 B 8 O 7 0 ? > G 2 0 B 4 0 3 = 8 O B. : > ? > G 2 0 B 0 5
? J ; = 0 A 2 > 4 0, @ 0 A B 5 = 8 O B 0 7 0 ? > G 2 0 B 4 0 C < 8 @ 0 B > B 3 J 1 = 8
7 0 1 > ; O 2 0 = 8 O ? > : > @ 5 = 8 B 5. @ > ; 5 B = > B > B > @ 5 = 5 2 > 4 8 4 >
A 8 ; 5 = @ 0 A B 5 6 8 7 0 1 0 2 O F J D B 5 6 0.

> ; 5 A B 8 8 2 @ 5 4 8 B 5 ; 8: ? @ 8 ? @ > 4 J ; 6 8 B 5 ; = 8 4 J 6 4 > 2 5
A J F 2 5 B 8 O B 0 G 5 A B > 7 0 3 = 8 2 0 B. A C E 8 3 > @ 5 1 8 C A ; > 2 8 O A 5
? > O 2 0 2 0 B 0 : 0 @ 8. 0 4 0 A 5 > B J @ 2 5 B 5 > B 0 : 0 @ 8 ? > @ 0 A B 5 = 8 5 B >,
= 0 9 - 2 0 6 = 0 B 0 7 0 4 0 G 0 5 4 0 A 5 ? > 2 8 H 8 2 ; 0 6 = > A B B 0 = 0 2 J 7 4 C E 0,
: J ; = > 2 5 B 5 4 0 A 5 ? @ J A : 0 B = O : > ; : > ? J B 8 4 = 5 2 = > A 2 > 4 0. 0
? J ; = > C = 8 1 > 6 0 2 0 = 5 A 5 8 7 ? > ; 7 2 0 2 - 3 : @ 0 B = > ? @ J A : 0 = 5 A J A
A < 5 A > B 3 ; 0 2 0 ; C ;, G 5 @ 2 5 = ? 8 ? 5 @, @ 0 2 = 5 F.

0 7 < = > 6 0 2 0 = 5: A 5 < 5 = 0. Tagetes < > 6 5 4 0 1 J 4 5 7 0 A O B = 0 ? @ 0 2 > 2
3 @ 0 4 8 = 0 B 0 2 : @ 0 O = 0 < 0 9 - = 0 G 0 ; > B > = 0 N = 8. > = 8 : 2 0 5 - 1 0 4 = 8
A ; 5 4 7 0 A 0 6 4 0 = 5. : > A 5 ? > : @ 8 5 A ; C B @ 0 A 8 ;, A ? 0 = 1 > = 4,
0 3 @ > A ? 0 = 8 ; 8 4 @. < 0 B 5 @ 8 0 ; < > 6 5 B 5 4 0 7 0 A 5 5 B 5 @ 0 A B 5 = 8 5 B >
4 5 A 5 B 4 = 8 ? > - @ 0 = > > B > 1 8 G 0 9 = 8 O A @ > ;, 8 ? > B > 7 8 = 0 G 8 = A 5

CA :> @ O 20 F J D B 5 6 0.
 :> 3 > A 5 5 B 5 2 A 0 : A 8 O 8 ; 8 : 0 B > @ 0 7 A 0 4. A @ 5 4 0 B 0 = 0 < 0 @ B A 5
 A 5 5 Tagetes erecta, 0 Tagetes Tenuifolia 8 Tagetes Patula A 5 7 0 A 0 2 0 B 2 = 0 G 0 ; > B > = 0
 0 ? @ 8 ;. @ 8 A ? 0 7 2 0 = 5 = 0 B 5 7 8 C A ; > 2 8 O 8 B @ 8 B 5 2 8 4 0 I 5
 7 0 ? > G = 0 B 4 0 F J D B O B ? @ 5 7 N = 8. 0 7 A 0 4 Tagetes 5 ; 5 A => 4 0 A 5
 > B 3 ; 5 6 4 0 B 2 7 0 : @ 8 B 0 A @ 5 4 0 4 > A 2 5 B J ; ? @ > 7 > @ 5 F = 0 B > ? ; >,
 4 > : 0 B > @ 0 A B 5 = 8 O B 0 A B 0 = 0 B A 8 ; = 8. 0 4 0 A 5 ? > ; C G 0 B 7 4 @ 0 2 8 8
 A 8 ; = 8 @ 0 A B 5 = 8 O 5 = C 6 = 0 @ > E : 0 8 E @ 0 = 8 B 5 ; = 0 ? > G 2 0 , (1 G 0 A B
 E C < C A + 1 G 0 A B B > @ D + 1 G 0 A B G 8 < 7 5 < O + 0, 5 G 0 A B ? O A J :),
 B 5 < ? 5 @ 0 B C @ 0 1 8 - 2 2 ° ! 8 C < 5 @ 5 = > ? > ; 8 2 0 = 5. > - < 0 ; : >
 2 7 8 A : 0 B 5 ; = 8 B 5 : J < ? > G 2 0 B 0 8 B 5 < ? 5 @ 0 B C @ 0 B 0 A 0 Tagetes Patula.
 0 : 0 @ 8 Tagetes 4 0 A 5 A G 8 B 0 7 0 = 5 ? @ 5 B 5 = F 8 > 7 5 =, B > 9 5 ? > - 4 > 1 @ 5
 4 0 A 5 7 0 A 5 5 = 0 A 2 5 6 0 ? > G 2 0 B 0, > A > 1 5 = > 7 0 Tagetes Tenuifolia.
 ! 5 < 5 = F 0 B 0 <> 3 0 B 4 0 A 5 7 0 A 0 4 O B 2 A 0 : A 8 8 < 0 ; : 8 : > D 8 G : 8 8 ; 8
 A 0 = 4 J G 5 B 0. 0 4 J => B >, 5 = 5 > 1 E > 4 8 <> 4 0 A 5 = 0 ? @ 0 2 8
 > B 2 > 4 = O 2 0 = 5 (4 @ 5 = 0 6) > B G 0 : J ;, : 5 @ 0 < 8 : 0 8 ; 8 5 4 J @ ? O A J :
 A ; > 9 > B 3 cm 8 ; 8 > B 2 > @ 8. ? @ > B 8 2 5 = A ; C G 0 9, @ 0 A B 5 = 8 5 B > <> 6 5
 4 0 C < @ 5 > B 3 J 1 = 8 7 0 1 > ; O 2 0 = 8 O. J @ 2 > = 0 G 0 ; = >, = 0 4
 = 0 ? @ 0 2 5 = 8 O 4 @ 5 = 0 6 A 5 8 7 A 8 ? 2 0 2 / 3 > B ? > G 2 0 B 0, C ? ; J B = O 2 0
 A 5 = 0 @ J : 0 8 ; 8 A 5 B @ 0 < 1 > 2 0. ! ; 5 4 2 0 1 8 O B A ; > 9 B @ O 1 2 0 4 0
 1 J 4 5 2 @ > E : > A J A B > O = 8 5 7 0 4 0 8 < 0 4 > A B 0 B J G => 2 J 7 4 C E 7 0
 = 0 @ 0 A B 2 0 1 8 B 5 : > @ 5 = 8. ! 5 < 5 B > A 5 A J 4 8 = 0 1 - 2 A < ? > 4
 ? > 2 J @ E => A B B 0. ! ; 5 4 ? > 4 3 > B > 2 : 0 B 0 = 0 ? > G 2 0 B 0 A 5 ? > ; 8 2 0 8
 A 5 > A B 0 2 O 7 0 5 4 8 = 4 2 0 4 = 8 = 0 B > ? ; > < O A B >, 4 > @ 8 7 0 4 C H =>.
 Tagetes A 5 < 5 = 0 A 0 3 > ; 5 < 8, 7 0 B > 2 0 B 5 <> 3 0 B 4 0 1 J 4 0 B ? > A 0 4 5 = 8 2
 1 @ 0 7 4 0 = 0 @ 0 7 A B > O = 8 5 1 - 1, 5 cm. 0 7 A B > O = 8 5 B > < 5 6 4 C 1 @ 0 7 4 8 B 5 1, 5 - 2
 cm. : > = 0 @ 0 A B 2 0 1 8 B 5 A B 5 1 ; 0 = O < 0 B 4 > A B 0 B J G => A 2 5 B ; 8 = 0
 8 7 B J = O 2 0 B, <> 6 5 8 4 0 7 0 1 > ; 5 O B.
 0 9 - ; 5 A = 8 O B = 0 G 8 = 7 0 ? > ; C G 0 2 0 = 5 = 0 > ? B 8 < 0 ; = 0 3 J A B > B 0, 5
 7 0 A 0 2 0 = 5 B > = 0 2 5 G 5 ? > ; J ; = 0 ; 8 A 5 < 5 = 0. 0 : J ; = O 5 <> A B B 0
 8 < 5 = 5 > 1 E > 4 8 <> 4 0 7 0 A B 5 ; 5 B 5 <> : @ 0 : J @ ? 0 2 J @ E C
 G 8 = 8 9 : 0 8 4 0 3 8 ? C A = 5 B 5 2 J @ E C = 5 O 8 ; 8 2 = 0 9 ; > = > 2 0
 B > @ 1 8 G : 0, ? > A B 0 2 5 = 8 = 0 B > ? ; > < O A B >. ! ; 5 4 2 - 3 4 = 8 A 5 < 5 = 0 B 0
 ? > ; J ; 2 0 B. > ; J ; = 0 ; 8 B 5 A 5 < 5 = 0 A 5 7 0 A 0 2 0 B = 0 0, 5 - 1 cm
 4 J ; 1 > G 8 = 0. : > 7 0 @ > 2 8 B 5 A 5 < 5 = 0 2 ? > G 2 0 B 0 ? @ 5 : 0 ; 5 = >
 4 J ; 1 > : >, B 5 = 5 <> 3 0 B 4 0 8 7 @ 0 A B 0 B, > A > 1 5 = > Tagetes tenuifolia. ! ; 5 4
 ? > A O 2 0 = 5 = 0 ? > 2 J @ E => A B = 8 O A ; > 9, ; 5 : > A 5 = 0 ? > O 2 0, 0
 A ; 5 4 B > 2 0 A 5 ? > : @ 8 2 0 A E 0 @ B 8 O. ! J 4 > 2 5 B 5 A 5 ? > A B 0 2 O B, = 0
 B > ? ; > < O A B > (2 2 - 2 5 ° C) 8 2 = 8 < 0 B 5 ; = > A 5 A ; 5 4 8 7 0 ? > G 2 5 = 0 B 0
 2 ; 0 3 0. ! ; 5 4 3 - 7 4 = 8, A 5 ? > O 2 0 2 0 @ 0 7 A 0 4 0, B @ O 1 2 0 4 0 A 5
 ? @ 5 < 5 A B O B = 0 ? > - A 2 5 B ; > < O A B > A ? > - 8 A : 0 B 5 < ? 5 @ 0 B C @ 0 (1 8 - 2 0
 ° C).
 : > 3 J A B > B 0 B 0 5 3 > ; O < 0 A 5 ? 8 : 8 @ 0 B. 0 7 A 0 4 J B 5 3 > B > 2 7 0
 7 0 A 0 6 4 0 = 5, : > 3 0 B > A 5 > 1 @ 0 7 C 2 0 B 2 - 3 4 2 > 9 : 8 ; 8 A B 0 8 A 8 ; = 0
 : > @ 5 = > 2 0 A 8 A B 5 < 0. 0 A 0 6 4 0 A 5 2 7 5 < O B 0 2 : @ 0 O = 0 < 0 9 -
 = 0 G 0 ; > B > = 0 N = 8, A 1 - 2 cm ? > - 4 J ; 1 > : >, > B : > ; : > B > 5 1 8 ; ? @ 5 4 8.
 0 7 A B > O = 8 5 B > < 5 6 4 C @ 0 A B 5 = 8 O B 0 7 0 2 8 A 8 > B 2 8 4 0 8 ; ; 0 A 0.
 8 A > : 8 B 5 2 8 4 > 2 5 A 5 7 0 A 0 6 4 0 B = 0 4 0 E 4 0 cm, A @ 5 4 = 8 B 5 = 0 3 0 E 3 0 cm 8

&

/ & " /

!B @ 0 = 8 F 0 3/3

= 8 A : 8 B 5 A > @ B > 2 5 8 E 8 1 @ 8 4 8 = 0 2 0 E 2 0 cm
@ 5 A 0 6 4 0 = 5 B > 5 ; 5 A => 2 J 2 2 A O : 0 2 J 7 @ 0 A B, 4 > @ 8 2
@ 0 7 F J D = 0 ; > A J A B > O = 8 5.

? > B @ 5 1 0: Tagetes ? @ 5 4 ? 0 7 2 0 B, 7 0 A 0 4 5 = 8 2 1 ; 8 7 > A B
7 5 ; 5 = G C : > 2 8 8 ; 8 4 @ C 3 8 @ 0 A B 5 = 8 O > B @ 5 4 8 F 0 3 J 1 = 8
7 0 1 > ; O 2 0 = 8 O, = 0 9 - 2 5 G 5 > B D C 7 0 @ 8 > 7 0, 7 0 1 8 B 0 2 0 B 8 > B = O : > 8
2 8 4 > 2 5 = 5 < 0 B > 4 8. 0 ? > 4 > 1 J @ F J D B 5 6 A 5 > B A B @ 0 = O 2 0 B
C 2 5 E = 0 ; 8 B 5 F 2 5 B > 2 5. J 2 2 > 4 0 B 0, B 5 8 7 4 J @ 6 0 B > : > ; > B @ 8
A 5 4 < 8 F 8. > = 0 A O B ? > 4 @ O 7 2 0 = 5. Tagetes A 5 8 7 ? > ; 7 2 0 ? @ 8 2 A 8 G : 8
2 8 4 > 2 5 F 2 5 B = 8 1 > @ 4 N @ 8, 8 2 8 F 8, ? @ 0 2 O B A 5 3 5 > < 5 B @ 8 G = 8
D 8 3 C @ 8, 7 0 < 0 A 8 2 8, F 2 5 B = 8 B 5 @ 0 A 8, 0 ; 5 8, F 2 5 B = 8 : J B > 2 5.
> - 2 8 A > : 8 B 5 A > @ B > 2 5 A 5 8 7 ? > ; 7 2 0 B 7 0 C : @ 0 A 0 : @ 0 9 A B 5 = 8 8 ; 8
6 8 2 8 ? ; 5 B > 2 5. " 5 A 0 < = > 3 > ? > 4 E > 4 O 1 8 7 0 A 5 = G 5 A B 8 B 5
3 @ 0 4 8 = 8 8 1 ; 8 7 > 4 > 2 > 4 > 5 < 8. Tagetes 8 7 4 J @ 6 0 B B 5 6 : 8 C A ; > 2 8 O 8
< 0 ; J : > 1 5 < = 0 ? > G 2 0 B 0. ! ; 5 4 > 2 0 B 5 ; = >, B 5 @ 0 A B 0 B 4 > 1 @ 5 2
A 0 : A 8 8 ? > ? @ > 7 > @ F 8 B 5, : > < 1 8 = 8 @ 0, A 5 4 > 1 @ 5 A 4 @ C 3 8
@ 0 A B 5 = 8 O. < 0 A ; C G 0 8, 4 0 ? @ 5 6 8 2 5 5 7 8 < 0 B 0 8 ? @ > ; 5 B B 0
> B = > 2 > 8 < 0 3 > ; 5 < 8 F 2 5 B > 2 5. (B > 2 0 A 5 > B = 0 A O A 0 < > 4 > Tagetes
patula).