

% @ 8 7 0 = B 5 < 0 - Chrysanthemum

gradinar, A J 1 > B 0 13 4 5 : 5 < 2 @ 8 2008 - 21:47:16

% @ 8 7 0 = B 5 < 0 B 0 5 5 4 => > B = 0 9 - ? > ? C ; O @ = 8 B 5 8
? @ 5 4 ? > G 8 B 0 = 8 A 0 : A 8 9 = 8 F 2 5 B O 8 F 2 5 B O 7 0 > B @ O 7 0 = F 2 O B .

> 4 J B % @ 8 7 0 = B 5 < 8 5 1 > 3 0 B A < = > 3 > 2 8 4 > 2 5 . # = 0 A , : > 3 0 B > A 5
: 0 6 5 @ > 4 % @ 8 7 0 = B 5 < 8 , E > @ 0 B 0 ? @ 8 5 < 0 B , G 5 B > 2 0
= 0 8 < 5 => 2 0 = 8 5 A 5 > B = 0 A O A 0 < > 7 0 E @ 8 7 0 = B 5 < 8 B 5 , 0 B > 2 0 = 5
5 B 0 : 0 , 7 0 I > B > : J < B > 7 8 @ > 4 A 5 > B = 0 A O B 8 5 4 => 3 > 4 8 H = 8
@ 0 A B 5 = 8 O 8 = O : > ; : > 2 8 4 0 , : > 8 B > > 7 = 0 G 0 2 0 < 5 A > 1 I > B >
= 0 8 < 5 => 2 0 = 8 5 < 0 @ 3 0 @ 8 B 8 , < 0 : 0 @ , G 5 B 5 A 0 @ 0 7 ; 8 G = 8 2 8 4 > 2 8 .

= 0 A = 0 9 - G 5 A B > A 5 > B 3 ; 5 6 4 0 B < 0 @ 3 0 @ 8 B 8 B 5 (Leucanthemum vulgare, L.maximum
8 Chrysanthemum coccineum) 8 E @ 8 7 0 = B 5 < 0 B 0 (Chr. indicum)
0 @ 3 0 @ 8 B 8 B 5 A 8 ? @ 8 ; 8 G 0 B B 2 J @ 4 5 < = > 3 > ? > A B @ > 5 6 = 0
F 2 5 B > 2 5 B 5 A E @ 8 7 0 = B 5 < 8 B 5 .
B ; 8 G 0 2 0 B A 5 A 0 < > ? > D > @ < 0 B 0 = 0 ; 8 A B 0 B 0 .

! E @ 8 7 0 = B 5 < 0 B 0 2 / ? > = 8 O 5 A 2 J @ 7 0 = 8 5 4 8 = > B
= 0 9 - ; N 1 8 < 8 B 5 = 0 F 8 > = 0 ; = 8 ? @ 0 7 = 8 F 8 - ? @ 0 7 = 8 : J B = 0
E @ 8 7 0 = B 5 < 0 B 0 - 4 5 2 5 B 8 A 5 ? B 5 < 2 @ 8 . 0 B > 7 8 4 5 = 2 E @ 0 < 0
! 5 = A > , A 0 : C 7 0 , A 5 ? @ > 2 5 6 4 0 B J @ 6 5 A B 2 5 = 0 F 5 @ 5 < > = 8 O 2
= 5 9 = 0 G 5 A B . % > @ 0 B 0 ? > 4 0 @ O 2 0 B E @ 8 7 0 = B 5 < 8 = 0 C 4 0 8
B @ J 3 2 0 9 : 8 A 8 2 7 5 < 0 B A J A A 5 1 5 A 8 7 0 4 > < 0 > A 2 5 B 5 = 8
A B @ J : G 5 B 0 > B = 5 O . ! < O B 0 A 5 , G 5 B O ? @ > 3 > = 2 0 7 ; 8 B 5 4 C E > 2 5 ,
1 > ; 5 A B 8 B 5 8 = 5 I 0 A B 8 O B 0 . @ > 2 5 6 4 0 = > B : @ 0 O = 0 ? 5 @ 8 > 4 0
4 > (% V 2 5 :) , 4 = 5 A ? @ 0 7 = 8 : J B 5 ? @ 5 @ 0 A = 0 ; 2 J 2 \$ 5 A B 8 2 0 ; ,
: > 9 B > G 5 A B 2 0 B 2 F O ; 0 B 0 A B @ 0 = 0 . 4 5 = O = 0 E @ 8 7 0 = B 5 < 0 B 0 A 5
? @ 0 2 O B : C : ; 8 2 G > 2 5 H : 8 @ J A B > B A 2 5 6 F 2 O B , A 1 > 3 0 B 0 3 0 < 0
@ 0 7 F 2 5 B : 8 8 D > @ < 8 .

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

?@07=8G5= !J15AB2C20B =0@>4=8 ?>25@8O, G5
 >B:JA=0B0B0 2 B>78 45= E@870=B5<0 8<0 <038G5A:0 A8;0.
 N1C209:8 A5 =0 E@870=B5<8B5, :8B09F8 8 O?>=F8 =5
 701@02OB 8 40 38 C?>B@51O20B 2 :CE=OB0 A8. B ;8AB5=F0B0
 =0 E@870=B5<0B0 ?@02OB A0;0B0. ;02=>B> 2 E@870=B5<0B0
 >10G5 =5 A0 =59=8B5 :C;8=0@=8, 0 5AB5B8G5A:8
 4>AB>9=AB20. >A;54=8B5 F25BO =0 3>48=0B0-
 E@870=B5<8B5 A5 ?>O2O20B A ?J@28B5 70ABC4O20=8O 8 70B>20
 B5 A0 ?> 5A5==> ABC45=8 8 ?@82;5:0B5;=8.
 8B09 E@870=B5<0B0 5 A8<2>;=0 <J4@>AB 8 4J;3>;5B85, 2
 /?>=8O- =0 10AB85, CA?5E, :JA<5B; 2J2 85B=0<- =0
 4CH52=0 G8AB>B0 8 18ABJ@ @07C<.

2@>?0 E@870=B5<0B0 18;0 4>=5A5=0 70 ?J@28 ?JB >15
 ?@57 %V 25:- ?@571676 3. 2 =3;8O >B E>;0=45F0 5545, =>
 B>3020 BO >AB0=0;0 B0< 8 2A5 >15 <0;F8=0 O ?>7=020;8.
 @85B> 5 40 A5 A<OB0, G5 @50;=> E@870=B5<0B0 5
 4>=5A5=0 ?@571789 3., :>30B> :0?8B0= 85@ ;0=H0@ O
 4>=5AJ; 2 0@A5;.
 @571829 3>48=0 3@048=0@OB >B "C;C70 5@=85 70?>G=0; 40
 >B3;5640 E@870=B5<8 G@57 A5<5=0. >;CG8;=O:>;>
 =>28, :@0A82> >103@5=8 @07=>284=>AB8. 420 A;54
 ?>;>28= AB>;5B85 >10G5, :>30B> 25G5 A5 >B3;5640;8 =04
 300 @07=>284=>AB8, E@870=B5<0B0 AB0=0;0 54=> >B
 ;N18<8B5 78<=8 F25BO 2 2@>?0. J@28 9 >1J@=0;8
 2=8<0=85 0=3;8G0=8B5, 70 :>5B> 3>2>@8 ?@07=8:JB 2
 @8AB0;=8O 42>@5F 2 >=4>= ?> A;CG09 @>645=8O 45= =0
 (8;5@ ?@571859 3., :>30B> 1NAB0 =0 25;8:8O ?8A0B5; 18;
 >B@C?0= A E8;O48 E@870=B5<8 A =09- @07=>>1@07=0 D>@<0
 8 103@0.

2@>?0 E@870=B5<8B5 A5 2J7?@85<0B 8 :0B> A8<2>;=0
 157<J;2=0 4J;1>:0 ?5G0;. \$@0=FC78B5, ?>G8B09:8
 <J@B28B5, ?>AB02OB =0 3@>10 8 >;> =53> 25=F8 8
 ?@>AB> AB@J:>25, ?>=O:>30 8 FJDBO18 @0AB5=8O 2 A0:A8O.

5>B402=0 2 0@86 A5 >B15;O70 AB>;5B85B> >B
 2J25640=5B> =0 ?J@28B5 E@870=B5<8 2 2@>?0 A 1>30B0
 87;>610, A =03@048 8 <540;8. 0 87;>610B0 18;8 ?>:070=8
 =041200 87;;NG8B5;=8 ?> A2>OB0 :@0A>B0 E@870=B5<8,
 :>8B> >1@07C20;8 A2>5>1@075= :8;8<, 0 70 1>@4N@
 A;C65;8 E@870=B5<8, ?>AB025=8 2J2 28A>:8 AJ4>25.
 !JAB57020;8 A580 A>@B0. 09-54@8OB F2OB, :>9B> ?>;CG8;
 =03@040B0, 18; >B A>@B0" 0;8A" A 480<5BJ@41 A<.

=5A AB@0ABB0 :J< F25BO AJA AB@0==0 8 5:7>B8G=0 :@0A>B0,
 >E;0640B >B=>H5=85B> :J< ?@>AB>B>, OA=>B> 8
 ?>@0640B ?@5=51@565=85 :J< 87OI=>B> 8 B>20 5 G0AB >B

=0H5B> 2@5<5. % @ 8 7 0 = B 5 < 8 B 5 - B578 BJ@65AB2C2018,
3>@48, <=>3>;8:8 87B>G=8 ?@8=F5A8, 45F0 =0 GC640 75<O,
?@>4J;6020B 40 ?@82;8G0B ?>3;548 8 GC2AB20, @0640B
=0AB@>5=85 8 2=CH020B A?>:>9AB285 8 E0@<>=8O, A BOE
?@5>B:@820<5 B@048F8O, @50;=>AB 8 4CE 157 AC5B0 8 157
:@09.

" :

%@870=B5<0B0Chr. indicum 5 <=>3> 1>30B AJA A>@B>25, :>8B> A5
>B;8G020B ?> 54@8=0, D>@<0 8 103@0 =0 F25B>25B5.
!>@B>25B5 A5 3@C?8@0B =0 425 >A=>2=8 3@C?8:
4@51=>F25B=8 8 54@>F25B=8.

>G20: %@870=B5<8B5 878A:20B A2J@70=8, ?@>?CA:;828 8
1>30B8 A E@0=8B5;=8 25I5AB20 ?>G28. "5 A0 GC2AB28B5;=8
:J< ?>2B>@=> >B3;5640=5 =0 54=> 8 AJI> <OAB>.
09-?>4E>4OI>B> 2@5<5 70 70A0640=5 =0 E@870=B5<8B5 5
?@57 N;8 8 =0G0;>B> =0 023CAB. @8 B0:J2 A@>: =0
70A0640=5 F2OB A5 ?>;CG020 ?@57 =>5<2@8.

&JDB56: 09-@0==8B5 E@870=B5<8 FJDBOB ?@57 A5?B5<2@8,
A;54 B>20 A0 >:B><2@89A:8B5 8 =0:@00 :JA=>
=>5<2@89A:8B5.
0@30@8B8B5 FJDBOB 87:;NG8B5;=> ?@57 ?@>;5BB0 4>
=0G0;>B> =0 ;OB>B>.
%@870=B5<8B5 A0 <=>3> 8 @07;8G=8 284>25, :;0A8D8F8@0B
38 A?>@54 D>@<0B0, 3>;5<8=0B0 8 103@8B5 =0 F25B>25B5 8<
8:0B> 8 A?>@54 2@5<5B> =0 FJDB560.

5AB>?>;>65=85: 072820B A5 4>1@5 8 FJDBOB >18;=> =0
>B:@8B8, A;J=G528 <5AB0 8 2 ?>;CAO=:0.
A8G:8 284>25 >B @>4 %@870=B5<8, A 87:;NG5=85 =0
54@>F25B=8B5 E@870=B5<8, A5 87?>;720B 70 70A0640=5 2
3>;5<8 8;8 <0;:8 3@C?8 ?@54 E@0AB8 8 2 B@52=8 ?;>I8 70
>B@O70= F2OB.
4@>F25B=8B5 E@870=B5<8 A5 >B3;5640B 2 >B>?;O5<8
>@0=65@88 8 A5 87?>;720B 87:;NG8B5;=> 70 ?>;CG020=5 =0
>B@O70= F2OB. B3;5640=5B> 8< =0 >B:@8B> 5 A2J@70=> A
@8A:>25.

5=78@0=5:

0 40 A5 ?>;CG0B ?>25G5 F25B>25 8 @07:;>=5=8O
@0AB5=8OB0 B@O120 40 A5 ?5=78@0B.
! ?5=78@0=5B> =0 54@>F25B=8B5 E@870=B5<8 A5 F5;8 40 A5
?@5<0E=0B @0==8B5 ?@>;5B=8 ?J?:8, 70 40 A5 >D>@<OB
54@8, A ?@028;=> D>@<0 8 A ?>-4J;38 4@J6:8 F25B>25.

J @2>B> ?5=78@0=5 A5 ?@028, :>30B> @0AB5=8OB0 4>AB830B
 28A>G8=010-15 A<, 0 2B>@>B> ?>:JA=>, 70 ?@5<0E20=5 =0
 :>@>=0 ?J?:0, >B :>OB> AJI> ?@8 ?>25G5B> A@>:>25 A5
 ?>;CG020B =54>AB0BJG=> :0G5AB25=8 F25B>25.
 >25G5B> A>@B>25 A5 >AB02OB 40 FJDBOB =0 :>@>=0
 ?J?:0.

@51=>F25B=8B5 E@870=B5<8 A5 ?5=78@0B A0<> 548= ?JB,
 :0B> A5 ?@5<0E=5 A0<> G0AB =0 <;048B5, ?>AB83=0;818-20 A<
 28A>G8=0 @0AB5=8O.

@854=>F25B=8B5 E@870=B5<8 206=0 <O@:0 70
 ?>;CG020=5 =0 28A>:>:0G5AB25=8 F25B>25 5
 ?@5<0E20=5B> =0 AB@0=8G=8B5 ?J?:8.

0 D>@<8@0=5 =0 4@51=>F25B=8B5 E@870=B5<8 A5 >AB02OB
 3-5 2@JE=8 @07:;>=5=8O, 0 2A8G:8 =0AB>O18 A5 ?@5<0E20B.

07<=>6020=5: @5A045B5 ?@57 ?@>;5BB0 0:> 5
 =5>1E>48<>. !;54 ?@5FJDBO20=5B> E@870=B5<0B0 <>65
 40 A5 ?@5A048 2 3@048=0B0 :J45B> BO I5 A5 2J@=5 :J<
 5AB5AB25=8B5 A8 =028F8 =0 @0AB56. 57=8F8B5 A5 70A0640B
 48@5:B=> 2 ?>G20B0.

>;5AB8:

5@B8F8;89=> C2OE20=5 3J15=0 1>;5AB. >;=8B5
 @0AB5=8O C2OE20B 2=570?=> ?> 2@5<5 =0 FJDB560. >
 ;8AB0B0 8< A5 ?>O2O20B 1;54> 75;5=8 4> 6J;B8 =5?@028;=8
 ?5B=0. J10B0 ?@8G8=8B5; 78<C20 ?> @0AB8B5;=8B5
 >AB0BJF8 =0 70@075=8B5 @0AB5=8O.

>@10: 0A53=0B8B5 @0AB5=8O A5 87A:C120B 8 8730@OB.
!82> 3=85=5 3J15=0 1>;5AB. 8AB0B0 =0 70@075=>B>
 @0AB5=85 AB020B :ODO28, 0 ?> F25B>25B5 A5 ?>O2O20B
 A25B;>:ODO28 ?5B=0 A =5?@028;=0 8;8 >20;=0 D>@<0.
 >@10: "@O120 40 A5 =0<0;8 2;06=>ABB0 =0 2J74CE0 8
 <>:@5=5B> =0 @0AB5=85B>.

8AB=8 ?5B=0 - 3J15=0 1>;5AB. 072820 A5 =0 4>;=8B5 ;8AB0 8
 A5 @07?@>AB@0=O20 :J< =09-3>@=8B5. > 70@075=8B5 ;8AB0
 A5 >1@07C20B A25B;>:ODO28 :@J3;8 BJ<=8 ?5B=0.
 >@10: 09-4>;=8B5 ;8AB0 =0 E@870=B5<0B0 A5 >18@0B.
 &25B>25B5 A5 ?@JA:0B ?@54?07=> A1%->2 1>@4>;57>2
 @07B2>@ A ?@8102:0 =0 A<>;8AB A0?C= 250<; 7010; @07B2>@.