

Gut gerüstet in die Zukunft

In die Handelsregale kommt Bewegung: Die Ankündigung der neuen EU-Kunststoffstrategie, die bis zum Jahr 2030 nur noch recyclingfähige Verpackungen erlaubt, lässt Hersteller nach Lösungen suchen. Um Produktschutz und Hygiene zu gewährleisten, sind Kunststoffe, oft ausgestattet mit notwendigen Barriereeigenschaften, u. a. zur Verpackung vieler Lebensmittel unerlässlich. Produzenten arbeiten an Lösungen, um mehr Ressourcenschonung zu erreichen, ohne an Produktschutz einzubüßen. In einem Projekt über europäische Ländergrenzen hinweg ist nun ein Durchbruch gelungen: Die Schweizer Bigler AG Fleischwaren und die deutschen Unternehmen, der Maschinenbauer Sealpac GmbH, die belgische Firma Van Genechten Packaging mit deutschem Standort und der Folienhersteller Buergofol GmbH, haben FlatMap …



In dem Familienunternehmen Bigler rund um Gérard Bigler (Bild) fanden das Maschinenbauunternehmen und die beiden Verpackungsanbieter den geeigneten Partner für ihre innovative Idee. (© Sealpac)

≠`X]Y`<UbXY`gfY[U`Y`_ca a h`6Yk Y[i b[.`8]Y`5b_ØbX][i b[`XYf
bYi Yb`9I !?i bghgħcZZghfUhY[]Yž`X]Y`V]g`ni a `JU\ f`&\$' \$`bi f`bcW
fYWhW]b[ZÀ\][Y`J YfdUW_i b[Yb`Yf`Ui Vhž`Aggh<YfghY``Yf`bUW
@Ogi b[Yb`gi WYb``I a `DfcXi _h`gW i hn`i bX`<m[]YbY`ni
[Yk Á\ f`Y]ghYbž`g]bX`?i bghgħcZZYžcZh`Ui g[YghUhhYh`a]h
bch`k YbX][Yb`6Uff]YfYY][YbgWUZhYbž`i ``U``ni f`J YfdUW_i b[`j]Y`Yf
@YVYbga]hhY``i bYf`Agg]W

DfcXi nYbhYb`UfVY]hYb`Ub`@Ogi b[Ybž`i a `a Y\ f
F Yggci fWYbgWcbi b[`ni `YffY]WYbž`c\ bY`Ub`DfcXi _hgW i hn
Y]bni VØ» Yb``≠`Y]bYa`Dfc Y_hØVYf`Yi fcdÀ]gW Y`@AbXYf[fYbnYb
`]bk Y[`]gh`bi b`Y]b`8i fWVfi WY`[Y`i b[Yb.`8]Y`GW k Y]nYf`6][`Yf
5; `: `Y]gW k UfYb`i bX`X]Y`XYi hgW Yb`I bħYfbY\ a Ybž`XYf
A UgW]bYbVUI Yf`GYU`dUW; a V<ž`X]Y`VY`[]gW Y`:]fa U`J Ub
; YbYW hYb`DUW_U[]b[`a]h`XYi hgW Ya`GħUbXcfh`i bX`XYf
: c`]Yb\YfghY``Yf`6i Yf[cZc`]; a V<ž`\UVYb`:]UhA Ud`ni f
A Uf_hfY]ZY`[YVfUW h`8]YgY`bYi Y`A 5D!J YfdUW_i b[`ZØf
Ui Z[YgW b]hhYbY`DfcXi _hYž`X]Y`ni `Y]bYa` `c\Yb`5bhY]`Ui g
: UgYfghcZZYb`VYghY\hž`]gh`_ca d`Yhh`fYWhW]b[ZÀ\][`i bX`gYhn
A U» ghAVY`Ua`DC G"

Y`Dcfh]cb`HfUX]h]cb

≠`XYa`:]Ua`]Ybi bħYfbY\ a Yb`6][`Yf`fi bX`i a `; ÁfUFX`6][`Yf
ZUbXYb`XUg`A UgW]bY`VUI i bħYfbY\ a Yb`i bX`X]Y`VY]XYb
J YfdUW_i b[gUbV]YhYf`XYb`[YY][bYhYb`DUfhbYf`ZØf`]\fY`]bbcj Uhjj Y
≠`YY``8Yf`:]Y]gW dfcXi nYbh`a]h`a Y\ f`U`g`+\$`A]hUfVY]hYfbž
Għua a g]hn`]b`6ØfYb`Ub`XYf`5UfY`i bX`gYW k Yf_Yb`Ub`XfY]
GħUbXcfhYbž`ghY\h`gY]h`+) `JU\ fYb`ZØf`Yb[U[]YfħYg
A Yhn[Yf\UbXk Yf_`

I bħYf`XYa`A chħċ` Y`Dcfh]cb`HfUX]h]cb` `VY`]YZYf`XYf
: `Y]gW dfcXi nYbh`XYb`8YhU]\UbXY`i bX`A Yhn[YfY]Yb`]b`XYf
GW k Y]n`a]h`9][Yba Uf_Yb`i bX`XYf`A Uf_Y`6][`Yf``8]Y
5i Z[YgW cggYb\Y]h`ZØf`≠`bbcj Uh]cbYb`VYk]Yg`XUg`I bħYfbY\ a Yb`i "

U"·]a ·`U\ f·&\$%+ž·U`g·Yg·U`g·J cffY]hYf·a]h·Y]bYf·: `UhG_]b!
 J YfdUW_i b[·Yfgha U`g·[Yg_]bbhY·DfcXi _hY·Ui Z`Y]bYa
 ?UfhcbhfÀ[Yf·Ui ZXYb·A Uf_h`VfUW hY"·8 Ua]h[UV·6][·Yf·XYa
 GWk Y]nYf·A Uf_h`X]Y·bÒh][Yb·: a di `gY·i bX·VYfY]hYhY·XYb·K Y[·ZØf
 G_]b`Ògi b[Ybž`X]Y·gY]h\Yf·j]Y·ZUW Yf·A Uf_hghUbXUfX·g]bX"



=b b c j Uh]cb

]a ·? Ø\ `fY [U`

Bi b·gcf[h·XYf·; YgWÀZhgVYfY]W·7\UfW hYf]Y·a]h·Y]bYf·k Y]hYfYb
 ≠bcj Uh]cb ZØf·5i ZgY\Yb·Ua ·?Ø\ `fY [U`·: `UhA Ud ·]gh·Y]bY
 k]YXYfj YfgW·]Y» VUfYž·ni ·Y]bYa ·[fc» Yb·HY]·ZUgYfVUg]YfhYž
 fYWnW]b[ZÀ\][Y·J YfdUW_i b[·ZØf·Ui Z[YgW b]hhYbY
 : `Y]gW dfcXi _hY"·5a ·DC G·gcf[h: `UhA Ud ·ZØf·\ ØW gh·Uh hfU_h]j Y
 K UfYbdfÀgYbhUh]cb. ·8]Y·j c``_ca a Yb·ZUW Y·J YfdUW_i b[·VYghY\h
 Ui g·Y]bYa ·Uh hfU_h]j ·[YghU·hYhYb : G7!DfcXi _h hfÀ[Yfž`·Ua]b]Yfh·a]h
 Y]bYf·\Ui W XØbbYb ·?i bghghc ZzgW]W hž·Ui Z`XYa ·X]Y
 5i ZgW b]hhk UfY·c\ bY·9bhbU\ a Y·Y]b`UXYbX·gYfj]Yfh·k YfXYb ·_Ubb"
 8 Yf·HfÀ[Yf·]gh·a]h·Y]bYf·\cW hUbgdUfYb hYb·C VYfZc·]Y·j Yfg]Y [Y·hž
 X]Y·XYb·6·]W·Ui Z`XUg·DfcXi _h·ZfY][]Vh·J cf·J YfnY\ f·`Aggh·g]W·X]Y
 C VYfZc·]Y·j c``ghÀbX][·j cb·XYf·J YfdUW_i b[·UVn]Y\Yb"

GdÀhYf·k]fX·X]Y·: c`]Y·k]YXYf·[·Uh·ØVYf·XUg·DfcXi _h·[Yghf]W Yb
 i bX·j YfgW·]Y» h`X]Y·J YfdUW_i b[·ni f·k Y]hYfYb ·5i ZVYk U\fi b[
 ni j Yf·Àgg][·8]Y·Yb[·Ub·]Y[YbXY·: c`]Y·`Aggh·k Yb][Yf·GUI Yfghc Z·]b
 X]Y·J YfdUW_i b[·U`g·Y]bY·\Yf·_Oa a ·]W Yž·k]YXYfj YfgW·]Y» VUfY
 H]Yzn]Y\j YfdUW_i b[·8 UXi fW·j YfZÀfVh·g]W·XUg·DfcXi _h·k Yb][Yf
 i bX·XYf·`b\U·h`V·Y]Vh·k À\ fYbX·XYf·[YgUa hYb·F Ygh`U[YfXUi Yf

Zf]gWX .i bX 'UddYhjh]WX "

8 Ug'6YgcbXYfY'X]YgYf'A 5D!J YfdUW_i b[ž'bYVYb'XYf'Y]bn][Ufh][Yb
K]YXYfj YfgWX `i gge i U`]hÀh 'B UWX 'XYf'9bhYYfi b[``UggYb'g]WX
?i bghghcZZ'i bX ?Ufhcb'gUi VYf'j cbY]bUbXYf'hfYbbYb 'i bX]b 'XYb
YbhgdFYWX YbXYb 'K YfhghcZZgUa a `i b[Yb 'Yb hgc[Yb"

9b [U[]YfhYg'; Ya Y]b gWX UZhgdfc ^Y_h

8]Y 'XYY 'ni ': `UhA Ud'ghUa a hY 'j cb 'XYf'GYU`dUW; a V<"`I bhYf'XYa
I bhYfbY\ a Ybga chhc' : cfa]b[`bbcj Uh]cbg 'Ybhk]W_Y`h'i bX
dfcXi n]Yfh'XUg'ZUa]]Yb[YZØ\ fhY 'a]hhY`ghÀbX]gWX Y
A UgWX]bYbVUi i bhYfbY\ a Yb 'b]WX h'i f'<][\hYWX !HfUmgYU'Yf'i bX
!H\Yfa cZcfa Yfž'gcbXYfb ']gh'Ub 'XYf'?fYUh]cb 'j]Y'Yf'nY]h[Ya À» Yf
J YfdUW_i b[g]bbcj Uh]cbYb 'VYhY][hž'Yk Y]g'dYfZY_h'UV[Ygh]a a h
Ui Z'X]Y'GYU`dUW5b 'U[YbhYWX b]_ " `bb'gY]bYf'9bhk]W_`i b[gUfVY]h
cf]Ybh]Yfh'g]WX 'XYf'A UgWX]bYbVUi Yf'j cfUi ggWX Ui YbX 'Ua '6YXUFZ
gY]bYf'?i bXYb"

=a 'Ni [Y'XYf'bYi Yb '9I !J YfdUW_i b[gj YfcfXbi b[ž'X]Y'V]g'&\$' \$
Y]bY '_ca d`YhhY 'F YWhWX]b[ZÀ\][_Y]h'j cb 'J YfdUW_i b[Yb ']bbYf\ U`V
XYf'9I 'ZcfXYfhž'_Ua 'X]Y 'j cb 'GYU`dUWa]hYbhk]W_Y`hY ': `UhG_]b!
@Ogi b['ZØf'G_]bdFcXi _hY 'Ui Z'XYb 'A Uf_h'5i g'Dfc ^Y_h[YgdfÀWX Yb
i bX 'a '5i ghUi gWX 'a]h?i bXYb 'k i fXY ' _Ufž'XUgg 'Ui WX 'ZØf'i bhYf
A 5D!j YfdUW_hY 'DfcXi _hY 'bUWX 'XYfUfh][Yb '@Ogi b[Yb '[Ygi WX h
k i fXY ''Ni gUa a Yb 'a]h'XYa 'DUfhbYf'J Ub ' ; YbYWX hYb 'DUW_U[]b[
YbhghUbX'X]Y'; fi bX]XYY 'ni ': `UhA Ud''6i Yf[cZc`'gh]Y » 'U'g
dUggYbXYf': c`]YbdUfhbYf'XUni "

6][`Yfž'`Ub[`À\ f][Yf'?i bXY 'j cb 'GYU`dUWi bX 'Y]XYbgWX UZh]WX Yf
6YhfY]VYf'XYg'A Yhn[Yf\ UbXk Yf_g']b 'j]YfhYf'; YbYfUh]cbž'ZØ\ fh
gY]b'; YgWX ÀZh'i bhYf'XYb '?Yfbk YfhYb ' ZUa]]Àfž'Yb[U[]Yfh'i bX
_ca dYhYbh ''8]YgY'VYk Y]gh'6][`Yf'Ui WX ']b 'J YfdUW_i b[gZfU[Yb
fi bX 'i a 'B UWX \U'h][_Y]h'i bX 'nY][h'g]WX 'Ui Z[YgWX 'cggYb 'ZØf
`bbcj Uh]cbYb 'Gc 'YffY]WX hY'XYf': `UhA Ud!; YXUb_Y'X]Y'GWk Y]nYf
[YbUi 'ni a 'f]WX h][Yb 'NY]hdi b_h"

8 Ug'[Ya Y]bgUa Y'N]Y```Ui hYhY. : U_hcfYb 'k]Y'DfcXi _hgWX i hn'i bX

6Uff]YfY! i bX'F YW_W]b[Y][YbgW UZhYbž J YfdUW_i b[g[Yk]W h'i bX XYb [Yk ØbgW hYb 'K]YXYfj YfgW i gg']b 'Y]bYf'XYf'bUW\U'h][ghYb J YfdUW_i b[Yb 'Ua 'A Uf_hni 'j YfY]bYb"; Ya Y]b gUa 'ghØfnhYb 'g]W X]Y 'DUfhbYf]b 'X]Y 'Z]bU'Y '9bhk]W`i b[gUfVY]h'i bX'VfUW hYb 'XUg ?cbnYdh'ni f'A Uf_hfY]ZY"

6 Ygc bXYfY < YfUi gZcfXYfi b[Yb

A]h'XYa 'DfcXi _hhfÀ[Yf'Ui g': G7! ?Ufhcb 'Vf]b[h: `UhA Ud 'Y]bY 'YW hY Bcj]hÀh'bg' ?Ø\`fY[U'XYf'i b hYf'A 5D! j YfdUW_hYb'5i ZgW b]hhk UfY" 8]Y '[fc» Y < YfUi gZcfXYfi b['VYghY\h'XUf]bž'XUg'6cUfX'Ui g : UgYfghcZZYb'ZØf'X]Y'[Y_Ø\`hYb'DfcXi _hY']b': cfa 'ni '\U'hYbž'XYbb XUg'A UhYf]U'fYU[]Yfh'VYgc bXYfg'Ya dZ]bX']W 'Ui Z: Yi W h][_Y]h" ?UfhcbgdYn]U]ghJ Ub'; YbYW hYb 'DUW_U[]b['_cbbhY'\]Yf'gY]bY i a ZUggYbXY'9I dYfh]gY'Y]bVf]b[Ybž'X]Y i b hYf'UbXYfYa 'Ui g'XYa j cfUb[Y[Ub[YbYb : `UhG_]b! Dfc Y_hghJa a h"8Ug'ZØf: `UhA Ud [Yk À\`hY'A UhYf]U'nY]W bYh'g]W 'Xi fW 'GhUV']]hÀh'i bX 6YghÀbX][_Y]h'k À\fYbX'XYf'[YgUa hYb 'DfcnYgg_YhhY'Ui g"

I a 'a]_fcV]Y``Y'F]g]_Yb 'Ui gni gW ']Y» Ybž'k i fXY'bi f i bVYXXYb_`]W Ygž'Zf]gW ZUgYfVUg]YfhYg'A UhYf]U'Y]b[YgYhnh'8Yf ?Ufhcb 'k]fX'ja 'ei U']hUhj] '\cW k Yfh][Yb 'C ZzgYhXfi W_a]h@ck ! A][fUh]cb!: UfVYb 'i bX'!@UW_Yb 'VYXfi W_h"8Ug'Àggh'5bk YbXYfb k]Y'6][`Yf'[fc» Yb '[YghU'hYf]gW Yb 'Gd]Y'fUi a 'ZØf'Y]bY 'UhUfU_hj] Y DfÀgYbUh]cbž'i a 'XUg'ni 'j YfdUW_YbXY'DfcXi _h'UbgdYW YbX'ni f ; Y'hi b['ni 'Vf]b[Yb"

8 U'ZØf'XYb'J YfdUW_i b[gdfcnYgg'i bX'X]Y 'DfÀgYbUh]cb']a '[<](#)UbXY' Y]b 'UVgc'i h'd'UbYg'6cUfX'YfZcfXYf']W ']ghž'Ybhk]W_Y'hY'J Ub ; YbYW hYb 'DUW_U[]b['ZØf'gY]bY 'DUfhbYf'; i]XY']bYg'ni a cdh]a U'Yb'! a [Ub['a]h'XYa ' ?UfhcbhfÀ[Yf"

8]Y': c`]Y'Ui Z'A]b]a i a 'fYXi n]Yfh

B UW 'XYf'6YXfi W_i b['k]fX'XUg'?UfhcbVcUfX'a]h'Y]bYf'XØbbYb 6Uff]YfYZc']Y'ØVYfnc[Yb": c`]Yb!DUfhbYf'6i Yf[cZc'ghUbX'\]Yf'j cf XYf'5i Z[UVYž'Y]bYb '@]bYf'ni 'Ybhk]W_Y'bž'XYf'Y]bYfgY]hg'[i h'Ua ?Ufhcb '\UZhYhž'g]W 'UVYf'gdÀhYf'ni 'FYW_W]b[nk YW_Yb'Ui W ``Y]W h

XUj cb `hfYbbYb ``Àggħ"

; Yk À\`h'k i fXY`Y]b `Dc`mc`YZ]bVUg]YfhYg`i bX`fYWhWV`VUfYg
A UhYf]U``: Øf`XYb` : `Y]gW dfcXi nYbhYb`6][`Yf`k Uf`Y]bY
ni j Yf`Àgg][Y`F YWcgY!: i b_h]cb`XYf`J YfdUW_i b[`Y]b`A i gg``8]Y
9bhk]W_`i b[gUfVY]h`XYg` : c`]YbdfcZg`6i Yf[cZc`VfUW hY`Y]bY
C VYfZc`]Y`\Yfj cfžX]Y`g]W`Xi fW`Y]b`j YfVfUi W`YfZfYi bX`]W`Yg
² Zzb i b[gj Yf\U`hYb`Ui gnY]W`bYhi bX`[`Y]W`nY]h][`Y]bY`dYfZY_hY
K]YXYfj YfgW`i gg_fUZh`Ui Zk Y]gh"

5i » YfXYa`a i gghY`g]W`Yf[YghY`h'k YfXYbž`XUgg`g]W`XYf`@]bYf`XYg
? Ufhcb! `VcUfxg`VY]a`² ZzbYb`XYf`J YfdUW_i b[`b]W`h'a`]h`XYf
C VYfZc`]Y`j ca`HfÀ[Yfa UhYf]U``Øghž`gc`bXYfb`Yfghž`k Ybb`Yf`a`]h`XYf
F YWWhW]b[!@UgW Y`UV[Ync[Yb`k`fX``: Øf`X]YgY`j`]Y`gY]h][Yb
: c`]YbY][YbgW`UZhYb`k`UfYb`YYVYbZU`g`Y]bY`F`Y]\Y`j`cb
J YfdUW_i b[ghYghg`bØh][``G`W`]Y``]W`k`i`fXY`ZØf`Y]bYb
bUW\U`h][Yb`A UhYf]U`Y]b`gUhñ`X]Y`GhÀf`Y`XYf`VY]XYb` : c`]Yb`Ui`Z`Y]b
A`]b]a`i`a`fYX`i`n]Yfh"

GY]hYbg`XYg`? Ufhcb`]YZYfUbhYb`J`Ub` ; YbYW`hYb`DUW_U[]b[`VYghUbX
XYf`? bUW_di b_h`XYf`5i Z[UVYbghY`i`b[`XUf]bž`Y]bY`6U`UbW`ni
ZbXYb`nk`]gW`Yb`[i`hYf`<UZh`b[`XYf` : c`]Y`i`bX`[`Y]W`nY]h][`i`hYf
gdÀhYfYf`F`YWhW]b[Y][YbgW`UZhYb`XYg`? Ufhcbg``8U`X]Y`F`YWcgY!
: c`]Y`di`b_hi`Y``\Ø\YfY`5Vni`[g_fÀZhY`YfnYi`[hž`k`UfYb`]Yfni
Y]b][Y`J`Yfgi`W`Y]b`@Uvcf`i`bX`DfUI`g`gck`]Y`X]Y`5bdUggi`b[`XYf
GhUbnhY`W`b]_`bch`YbX][```b`i`a`ZUb[fY]W`Yb

J`Yfgi`W`Yb`[Y`Ub[hYb`X]Y`DUfhbYf`ni`Y]bYf`cdh]a`U`Yb`@Øgi`b[ž
k`Y`W`Y`X]Y`_cb_i`ff]YfYbXYb`N]Y`Y`YfZØ`h`i`bX`XUfØVYf`]bUi`g
Y]bYb`K`]YXYfj`YfgW`i`gg`XYf`C`VYfZc`]Y`Yfa`Ø[`]W`hž`k`Y`W`Yf`X]YgYb
B`Ua`Yb`j`YfX]Ybh"

DfcnYggg]W`YfY`<YfghY`i`b[

J Yfg]Y[Y`h`k YfXYb `X]Y : `UhA Ud!J YfdUW_i b[Yb `ZØf`X]Y `ZY]bY
5i ZgWXb]hhk UfY`j cb`6][`Yf`Ui ZY]bYa `GYU`dUWHfUmgYU`Yf`5+`]b
XcddY`VU\ b][Yf`J YfdUW_i b[gUi g`Y[i b[``=b[YgUa h`Àggh`g]WX`X]Y
J YfdUW_i b[`dfcnYggg]WX Yf`Ui ZgÀa h`]WX Yb `GYU`dUW5b`U[Yb `XYf
FY]\Y`5*`V]g`5%\$`\YfghY``YbžgcZYfb `X]Y`5b`U[Y `ZØf`X]Y
J YfUfVY]hi b[`j cb` : `UhA Ud!6cUfxg`j cfVYfY]hYh`]gh"

8 Ug`VYXYi hYhžg]Y`a i gg`ØVYf`XUg`Y]bn][Ufh][Yžj cb`GYU`dUWZØf
X]Y`6YZØfXYfi b[`XYf`YI hfYa `ZUWX Yb `HfÀ[Yf`Ybhk]W_Y`hY
HfUbgdcfhgmghYa `j YfZØ[Yb `i bX`Ui ZY]bYb `j YfÀbXYfhYb
6Y[Ugi b[g!`i bX`J Yfg]Y[Y`i b[gUV`Ui ZUi g[Yf]WX hYh`gY]b`8 Ub_
XYg`9]bgUhnYg`j cb`\cWX k Yfh][Yb `GYfj ca chcfYb `i bX
5bhf]YVgUVgh]a a i b[`UfVY]hYb `X]Y`5b`U[Ybžk]Y`Ui WX`X]Y`j cb
6][`Yf`Y]b[YgYhnhY`GYU`dUW5+ž`YbYf[]YYZZ]n]Ybh`i bX`Y]ghYb `XUa]h
Y]bYb `k Y]hYfYb `6Y]hfU[`ni `a Y\`f`B UW\ \U`h][_Y]h`]a
<YfghY``i b[gdfcnYgg"

F YWmW]b[ZÀ\][Y`J YfdUW_i b[Yb

6Y]`XYf`9bhk]W_`i b[`j cb` : `UhA Ud`k Uf`b]WX h`bi f`Y]bY`ØWX gh
Z`b_h]cbY``Y`i bX`UhhfU_hj] Y`J YfdUW_i b[`XUg`N]Y`ž`Ua `9bXY`gc``hY
j cf`U``Ya `Y]bY`b UW\ \U`h][Y`@Ogi b[`ghY`Yb`B UW\ `8 Yg][b!Zcf!
F YWmW]b[!5gdY_hYb `Ybhk]W_Y`h`ØVYfnYi [h`XUg`9f[YVb]g`X]YgYg
; Ya `Y]bgWX UZhgdFc Y_hg. `6Y]`X]YgYf`bYi Ufh][Yb `ZUgYfVUg]YfhYb
J YfdUW_i b[`cbbhY`XYf`?i bghghcZZUbhY`]a `J`Yf[`Y]WX`ni
\Yf_Oa a `]WX Yb `A 5D!J YfdUW_i b[Yb `i a `WU`+\$`i `fYX`i n]Yfh
k YfXYb`8 Yf`@]bYf`ZØf`XYb`?UfhcbhfÀ[Yf`]gh`Y]b`nYfh]Z]n]YfhYg
DfcXi _h`Ui Z`Dc`mc`YZ]b!6Ug]g`i bX`XUa]h`[i h`fYWmW`VUF"

9f`Àggh`g]WX`b UW\ ; YVfUi WX`Y]WX h`j ca `?UfhcbVcUfx`hfYbbYb"
5``Y`J YfdUW_i b[g_ca dcB`YbhYb `k YfXYb `XUbb`gYdUfUh]b`XYb
YbhgdF`YWX`Yb`XYb `K YfhghcZZgUa a `i b[Yb `Ybhgc`f`h`8]Y
J YfdUW_i b[gZc`]Yb `UggYb`g]WX`ni f`K]YXYfj Yfk Yfh`i b[`a]h`B`U`!
=ZfUfc`HYWX`b]_`]a `F YWmW]b[dfcnYgg`ni j Yf`Àgg][`YfUi gZ`hYfb`

A]h`X]YgYb`9][YbgWX UZhYb`YfZØ`h` : `UhA Ud`gWX cb`Yi hY`X]Y`9!`
J cf[UVYb`VYnØ[`]WX`XYf`F YWmW]b[ZÀ\][_Y]h`j cb`J YfdUW_i b[Yb
ZØf`&\$`\$`a`<Ui gY`6][`Yf`]gh`a`Ub`XUj cb`ØVYfnYi [h`XUgg`X]Y

j YfVYggYfhYb'Ø_c`c[]gWX Yb'9][YbgWX UZhYb'ZØf'J YfVfUi WX Yfžj cf
U`Ya'Øb[YfYži a k Y`hVYk i gghY'N]Y'[fi ddYbžY]b'YWX hYg
?Ui ZUf[i a Ybh]gh"

8]Yg`\Uh'g]WX 'XYf': `Y]gWX dfcXi nYbh]b'Y]bYf'dfcZYgg]cbY`Yb
Ghi X]Y'VYghÀh][Yb`UggYb.: `UhA Ud'k i fXY']b'Y]bYf'i bUV\Àb[][Yb
5bU`mgY'a]hXYb'VYghYb'Ua'GWk Y]nYf'A Uf_hj YfZØ[VUfYb
A]hVYk YfVYf!DfcXi _hYb'j Yf[`]WX Yb"8]Y'Ghi X]Y'VY`Y[hžXUgg'X]Y
bYi Y'J YfdUW_i b['a'<]bV']W'Ui Z'XYb'7C'!: cchdf]bh'g][b]Z_Ubh
VYggYf'UVgWX bY]XYhU'g'X]Y'FYZYfYbndfcXi _hY'žcVkc\`X]Y
I bhYfgi WX i b['bcWX'b]WX h'Y]ba U`X]Y'5gdY_hY'FYWhW]b[ZÀ\][_Y]h
i bX': ccXk UghY'a]h'Y]bVYn]Y\h"

8Ybb'XYf'YbYf[]Y]bhYbg]j ghY'DUFhØVYf\Ui dh]gh'X]Y
DfcXi _h\YfghY`i b['gY'Vgh"8U\Yf'VY[]bbh'B UW\U'h][_Y]h'Ui g
G]WX h'XYf'6YhY][hYb'a]h'i a ZUggYbXYa'DfcXi _hgWX i hnž'XYf'Y]bYb
k]WX h][Yb'6Y]hfU['ni 'k Yb][Yf': ccXk UghY`Y]ghYh"8]YgYb'YfZØ`h
: `UhA Ud'Xi fWX'X]Y'[i hYb'K]YXYfj YfgWX'i ggY][YbgWX UZhYbž'X]Y
XYb'J YfdUW_i b[g]b\U'h'V]g'ni f`YhnhYb'GWY]VY'Zf]gWX'\À`h"

9mYWUhwWX Yf']a' ? Ø\`fY[U`

: Øf'Y]bYb'ghUf_Yb'5i Zhf]hh'Ua'DCGžk Y'WX Yf'X]Y'5i Za Yf_gUa _Y]h
XYf'J YfVfUi WX Yf'Ui Z'XUg'DfcXi _h'i bX'X]Y'j cfhY]\UZhYb
fYggci fWX bgWX cbYbXYfYb'A Yf_a U'Y'XYf'J YfdUW_i b['Yb_h'gcf[h
: `UhA Ud'Xi fWX'9][YbgWX UZhYbž'X]Y'XUg'6fUbX]b['i bhYfghØhnYb.'=a
; Y[YbgUhn'ni '\Yf_Oa a ']WX Yb'H]Yzn]Y\j YfdUW_i b[Yb'V]YhYh
: `UhA Ud'A Uf_Yb]b\UVYfb'k]Y'6]['Yf_j]Y`'FUi a'ZØf
?ca a i b]_Uh]cb'i bX'A Uf_YbV]Xi b[ž'XYbb'XUg'?UfhcbVcUfX'Àggh
g]WX'VY]XgY]h]['UhkfU_h]j 'VYXfi W_Yb'i bX'ZØf'øZcfa Uh]cbYb
bi hnYb" GhY\YbXž\Àb[YbX'cXYf'Ui WX'']Y[YbX'dfÀgYb]Yfhž]gh'Yg
Xi fWX'gY]bYb'bYi Ufh][Yb'@cc'_i bX'X]Y'_ca d'YhY'G]WX h'Uf_Y]h
XYg'DfcXi _hg'Y]b'YWX h'Yf'9mYWUhwWX Yf"8U'X]Y'J YfdUW_i b['YI h'Y
ZUWX']ghž'Àggh'g]Y'g]WX'][b'Ø\YfYb'GhØW_nU\`Yb']a'?'Ø\`fY[U`

i b hYfVf]b[Yb i b X gcf[h X Ua]h ZOF YZZjn]Y b hY
DfcXi _hVYgW]W_i b['Ua 'DC G"

8 Yf J YfVfUi W Yf \]b[Y [Yb dfcZjh]Yfhj cb'a Y\ f: i b_h]cbU`]hAh'i bX
Y]bYa j YfY]bZUW hYb < UbX`]b[. 8]Y j ca ? UfhcbhfA[Yf j cf XYa
J YfnY\ f _ca d`Yhh'UV[Ync[YbY C VYfZc`]Y ``Aggh'g]W gdAhYf ZOF
Y]bYb g]W YfYb K]YXYfj YfgW i gg [Ubn ``Y]W h'k]YXYf'Ui ZX]Y
j c ``_ca a Yb ZUW Y J YfdUW_i b['ghfY]W YbZgcXUgg'XUg'l a dUW_Yb
XYg'b]W h'j YfVfUi W hYb b\ U'hg'YbhZA ``hi bX'XUg'b]W h'j YfnY\ fhY
DfcXi _hig]W Yf i bX'VYe i Ya]b'XYf J YfdUW_i b['_Ubb'Ui ZYYk U\fh
k YfXYb"

6Ygi WX Yb 'G]Y i bg'Ui Z. 'Z Y]gWX i bXWc "Uh