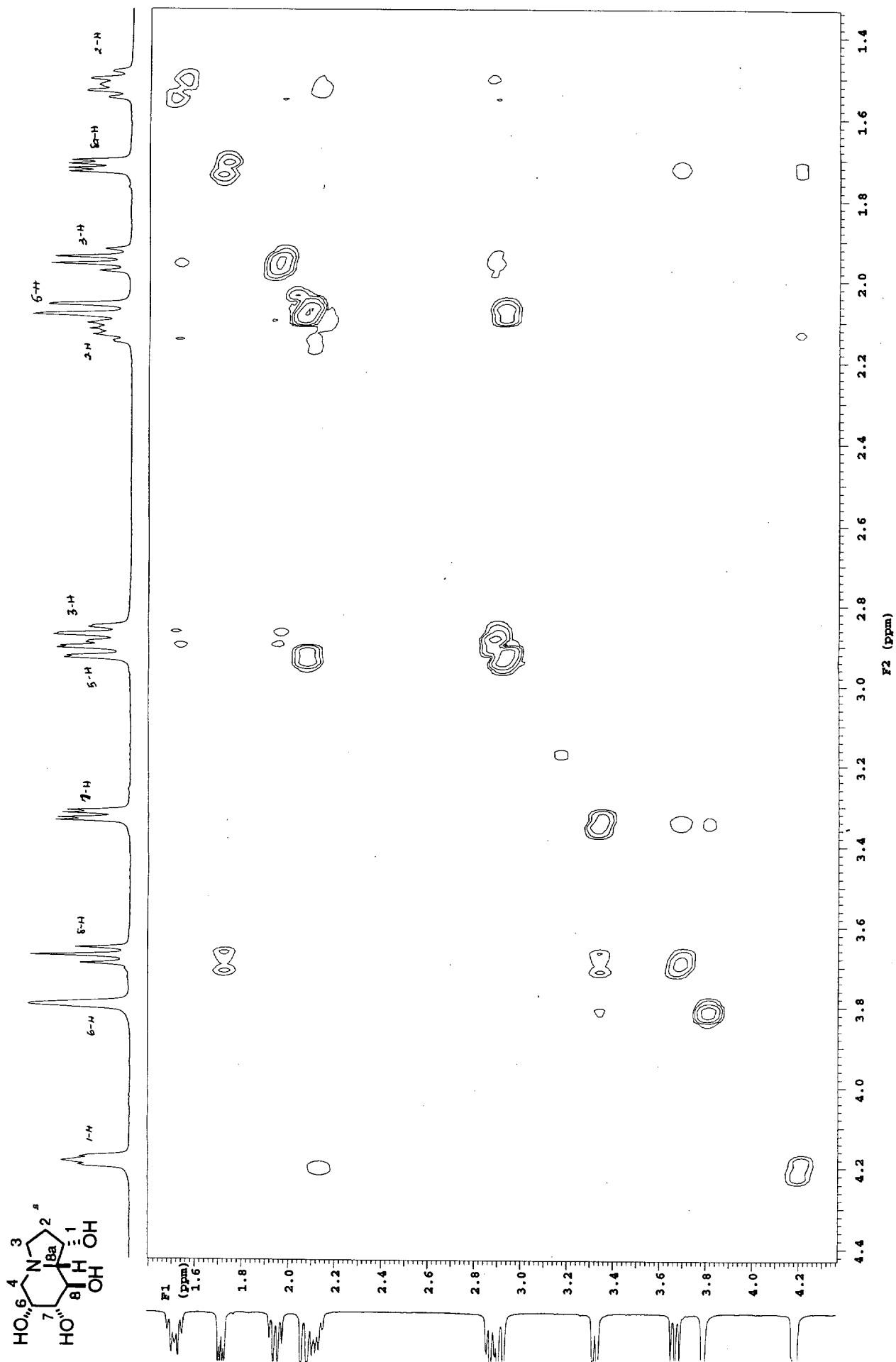
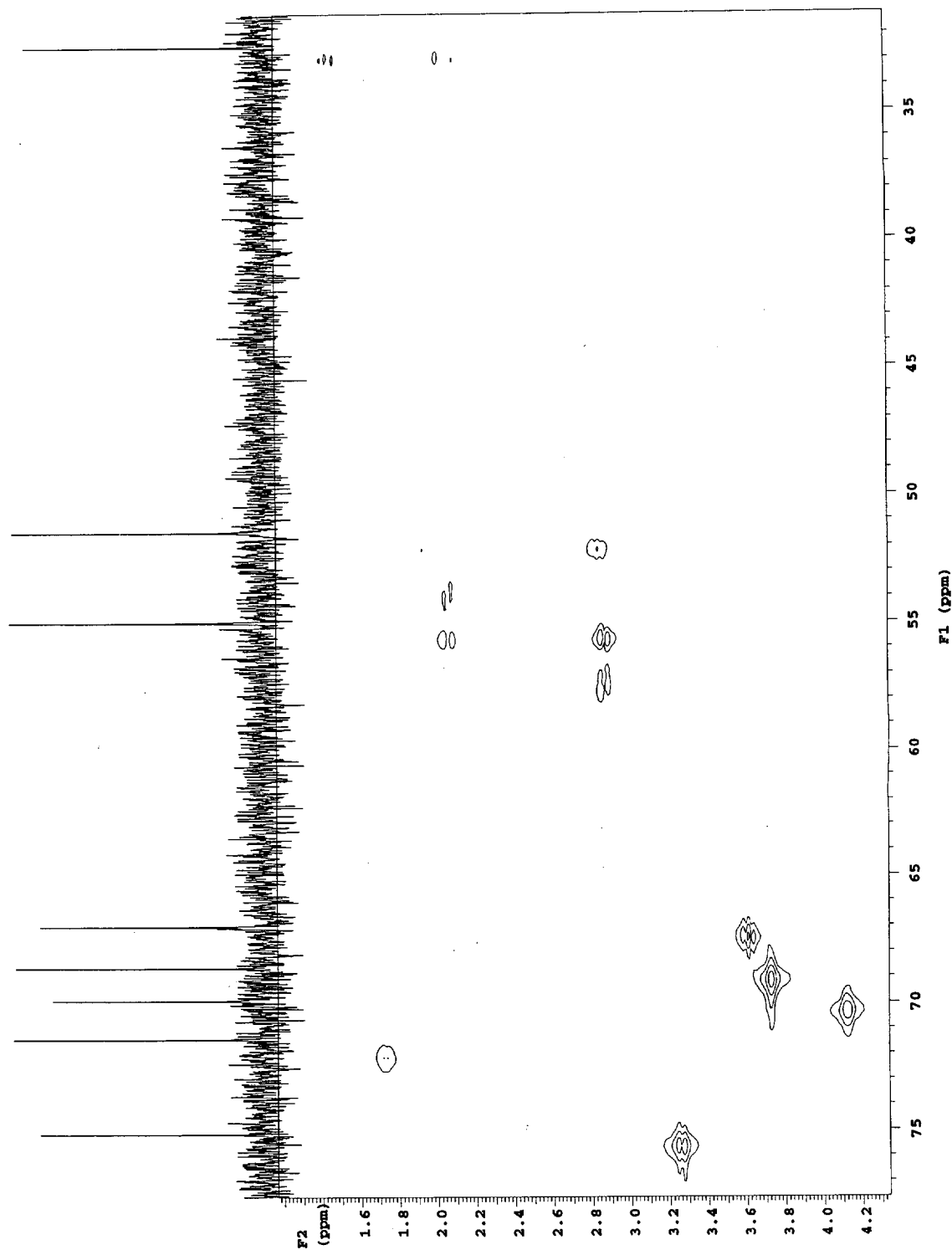
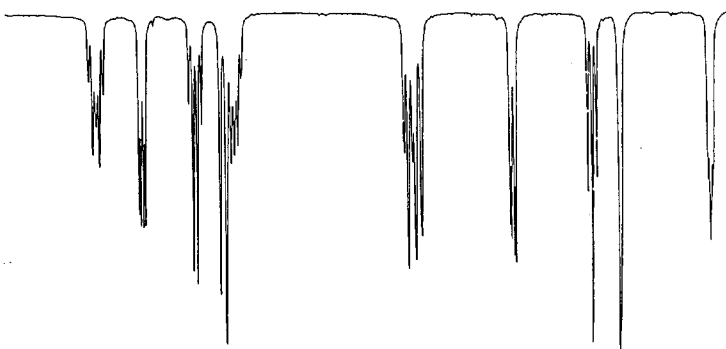
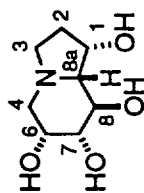




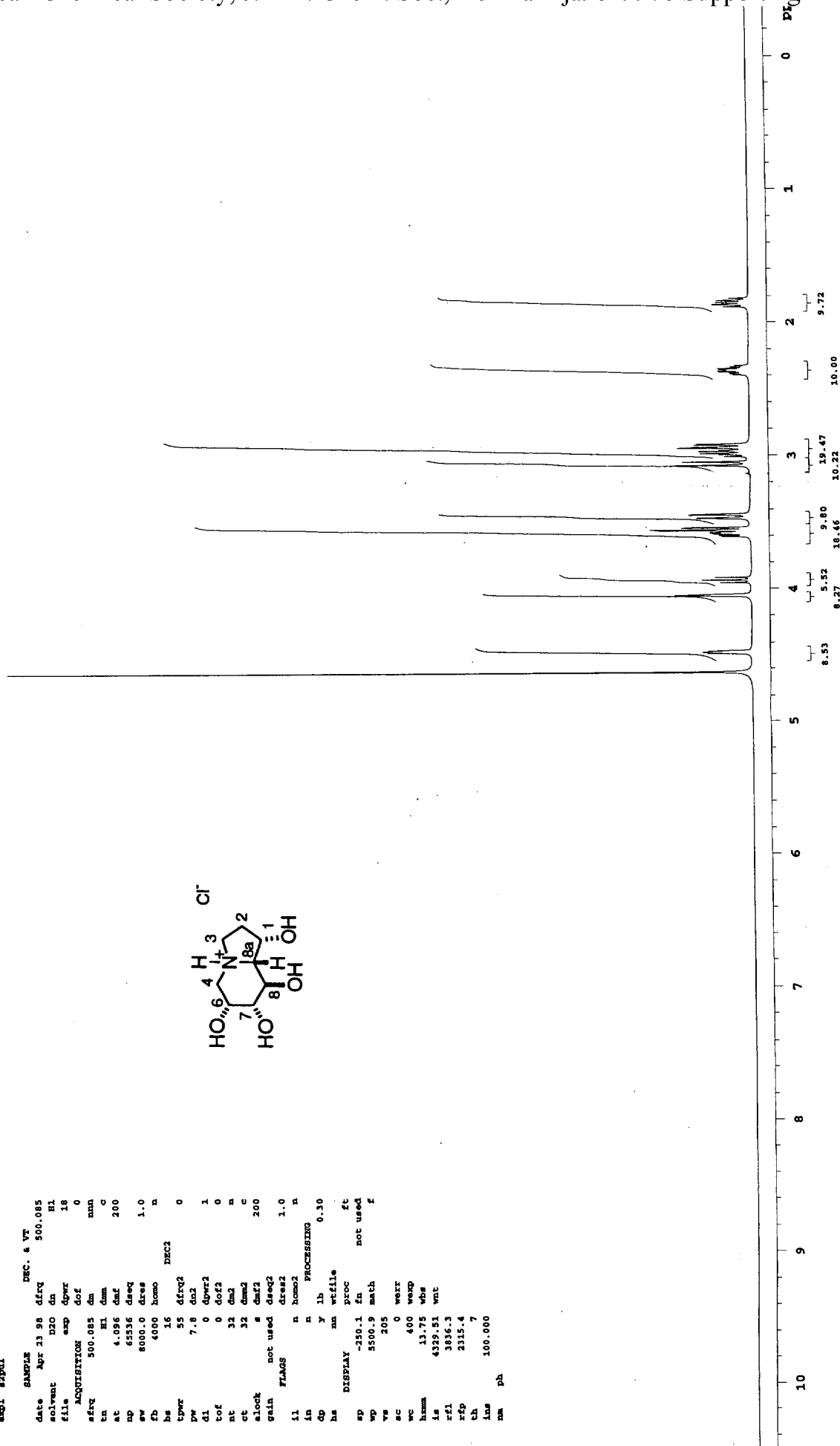
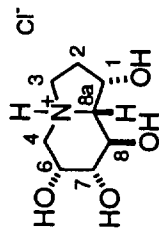


¹H NMR, ¹³C NMR, COSY, and HETCOR for
(+)-6-epicastanospermine hydrochloride ((-)-**39**)

STANDARD PROTON PARAMETERS

exp1 s2pul

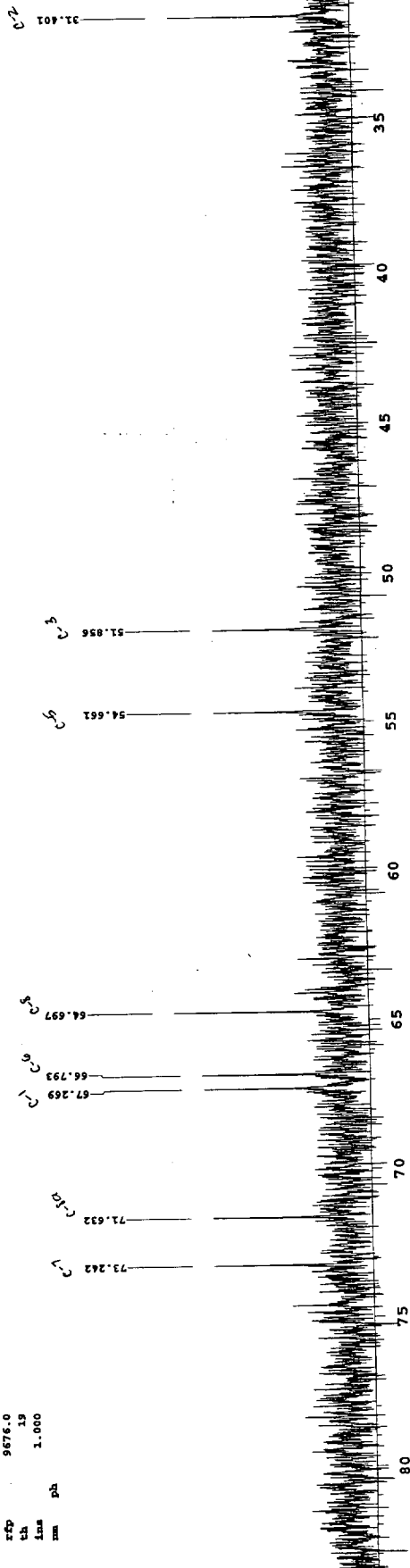
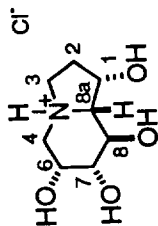
SAMPLE DEC. & VT
 date Apr 23 98 dfrq 500.085
 solvent D2O dn H1
 file exp dpr 18
 ACQUISITION dof 0
 sfrq 500.085 dn nun
 tn H1 dm c
 at 4.096 dmf 200
 up 65536 dseq
 pw 8000.0 dres 1.0
 fb 4000 homo n
 bs 16 dfrq2 0
 tpwr 55 dfrq2 0
 pw 7.8 dm2
 d1 0 dpr2 1
 tof 0 dof2 0
 nt 32 dm2 n
 ct 32 dm2 c
 alook a dmf2 200
 gain not used dseq2
 flags n homo2 dres2 1.0
 il n homo2 n
 in n lb PROCESSING 0.30
 qp y lb
 hs nm wfile
 DISPLAY nm proc ft
 sp -250.1 in not used
 wp 5500.9 math f
 vs 205
 sc 0 weir
 wc 400 weop
 hnm 13.75 wbs
 ls 4329.51 wnt
 xfl 3836.3
 xfp 2315.4
 th 7
 lms 100.000
 na ph

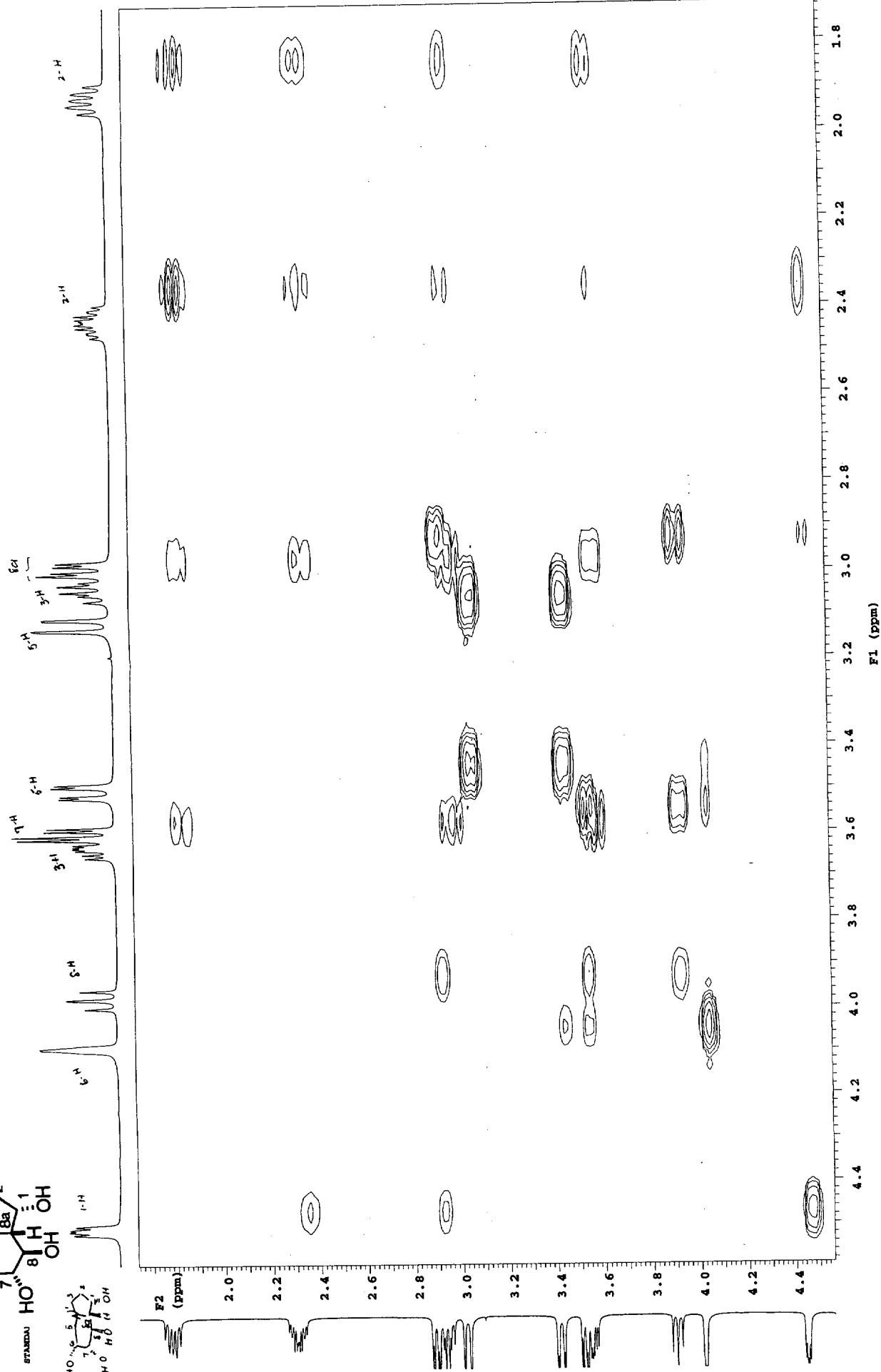
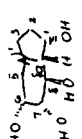
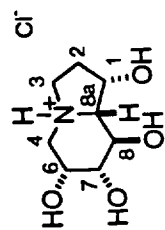


STANDARD CARBON PARAMETERS

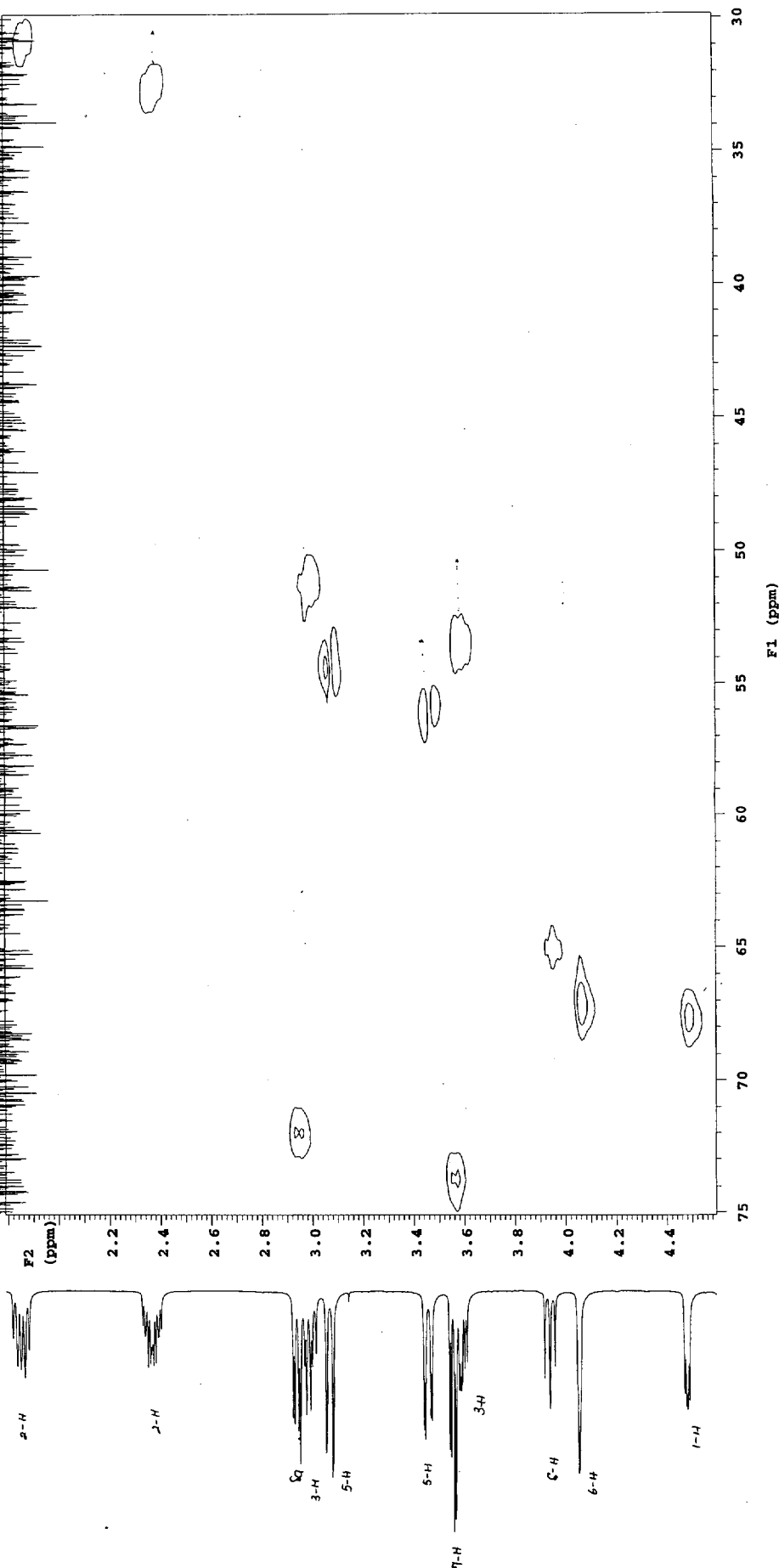
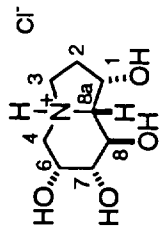
exp2 #2jul

SAMPLE DRC. & VT
 date Apr 24 98 dfrq 499.699
 solvent D2O Qn H1
 file /export/home/- Qnxt 43
 data /550/martino- Gof -829.0
 rough/sem.04.17.13- Qm Y77
 C.1 Qm w
 ACQUISITION Gmf 11055
 srfq 125.659 dseq
 tn C13 dres 1.0
 at 1.086 homo n
 up 46272 PROCESSING
 sw 21310.6 lb 1.00
 zb 11800 wfile ft
 bs 16 proc 1 fn not used
 ss 1 fn not used
 tpwr 54 math f
 pw 4.6
 dl 1.000 werr
 bcf -2457.7 wexp
 nt 10000 wbs
 ct 1142 wnt
 alock n
 gain not used
 FLAGS
 il n
 in n
 qp y
 bs nm
 DISPLAY
 sp 3108.2
 wp 7388.2
 vs 40
 sc 0
 wc 400
 hnm 18.47
 ls 500.00
 xfl 10877.2
 rfp 9676.0
 th 19
 lns 1.000
 nm ph





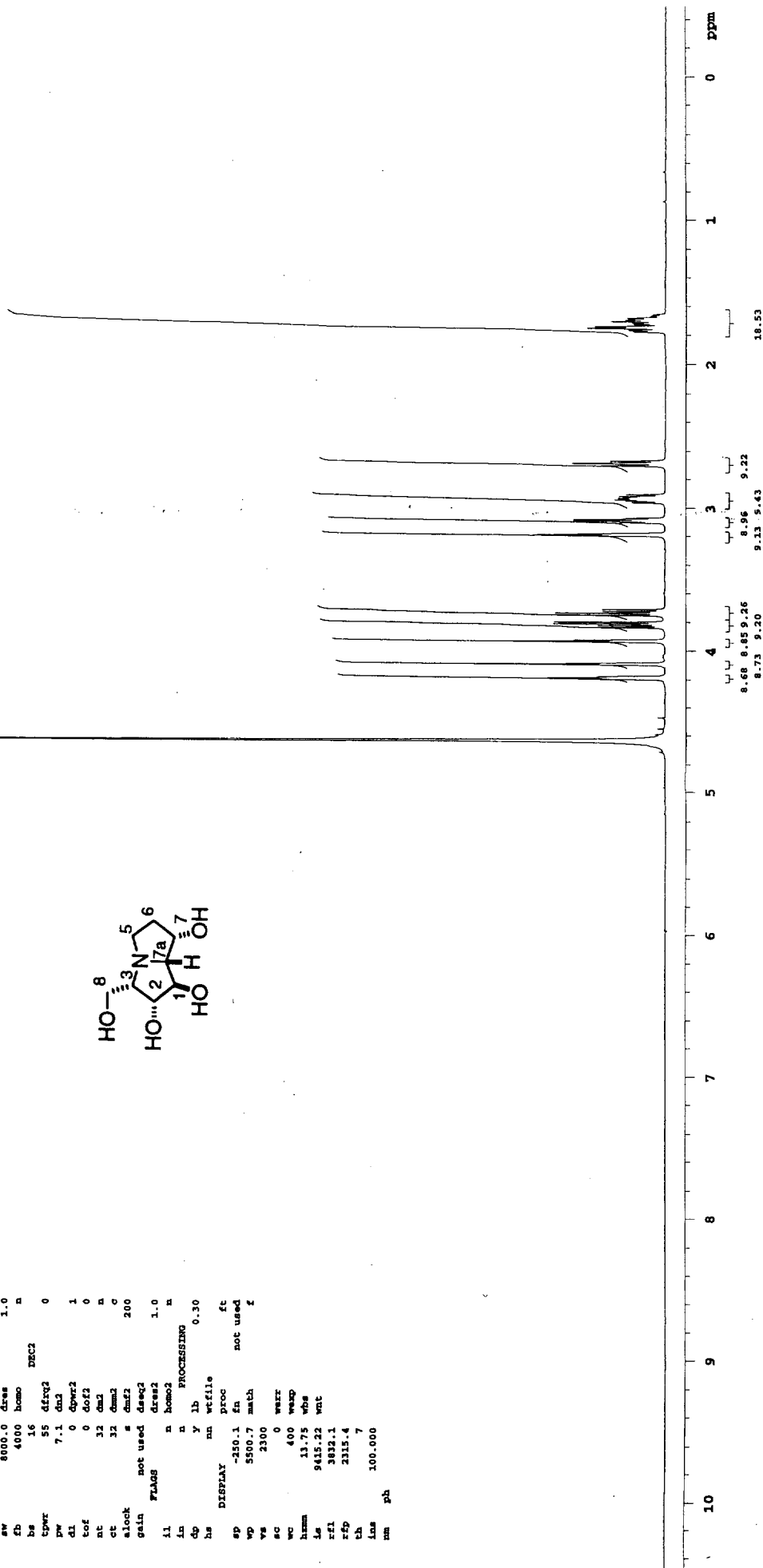
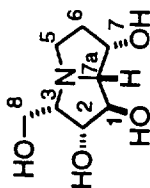
STANDARD PROTON PARAMETERS



¹H NMR, ¹³C NMR, COSY, and HETCOR for
(+)-3-epiaustraline ((+)-4)

STANDARD PROTON PARAMETERS

exp1 s2pul
 SAMPLE DEC. 4 VT
 date Jul 29 1998 dfrq 500.081
 solvent D2O dm
 file exp dfr 18
 ACQUISITION dof 0
 sfrq 500.081 dm
 tn H1 dm c
 at 4.096 dmf 200
 pw 45536 dseq
 av 8000.0 dres 1.0
 fb 4000 homo
 bs 16
 hpc 55 dfrq2 0
 pw 7.1 dm2
 di 0 dpr2 1
 tof 0 dof2 0
 nt 32 dm2 n
 ct 32 dm2 c
 alock s dm2 200
 gain not used dseq2
 flags n homo2 1.0
 il n
 in n
 dp y lb PROCESSING 0.30
 bs nm wfile
 DISPLAY -250.1 fn proc ft
 wp 5500.7 math not used f
 vs 2300
 ac 0 warr
 wc 400 warr
 hnm 13.75 wbs
 ls 9415.22 wnt
 xfl 3832.1
 rfp 2315.4
 th 7
 lns 100.000
 nm ph

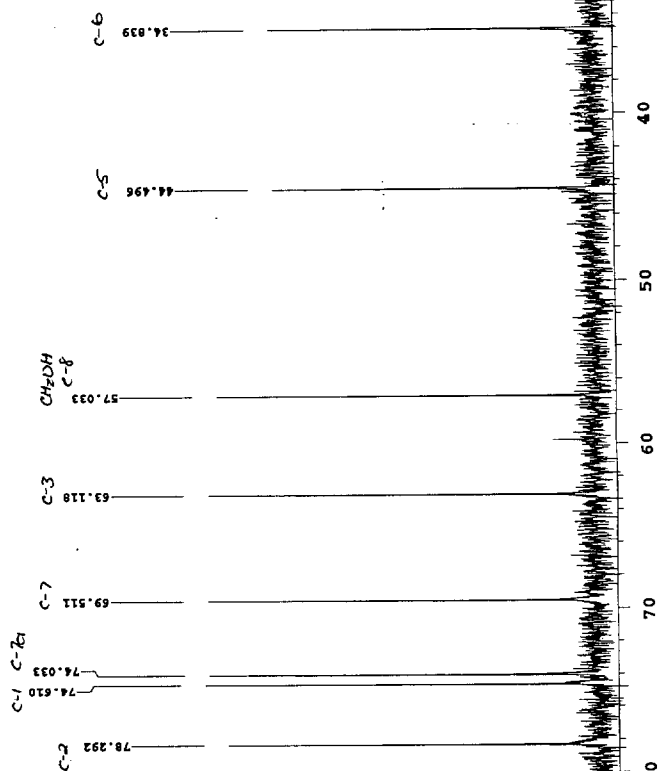
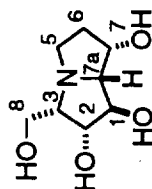


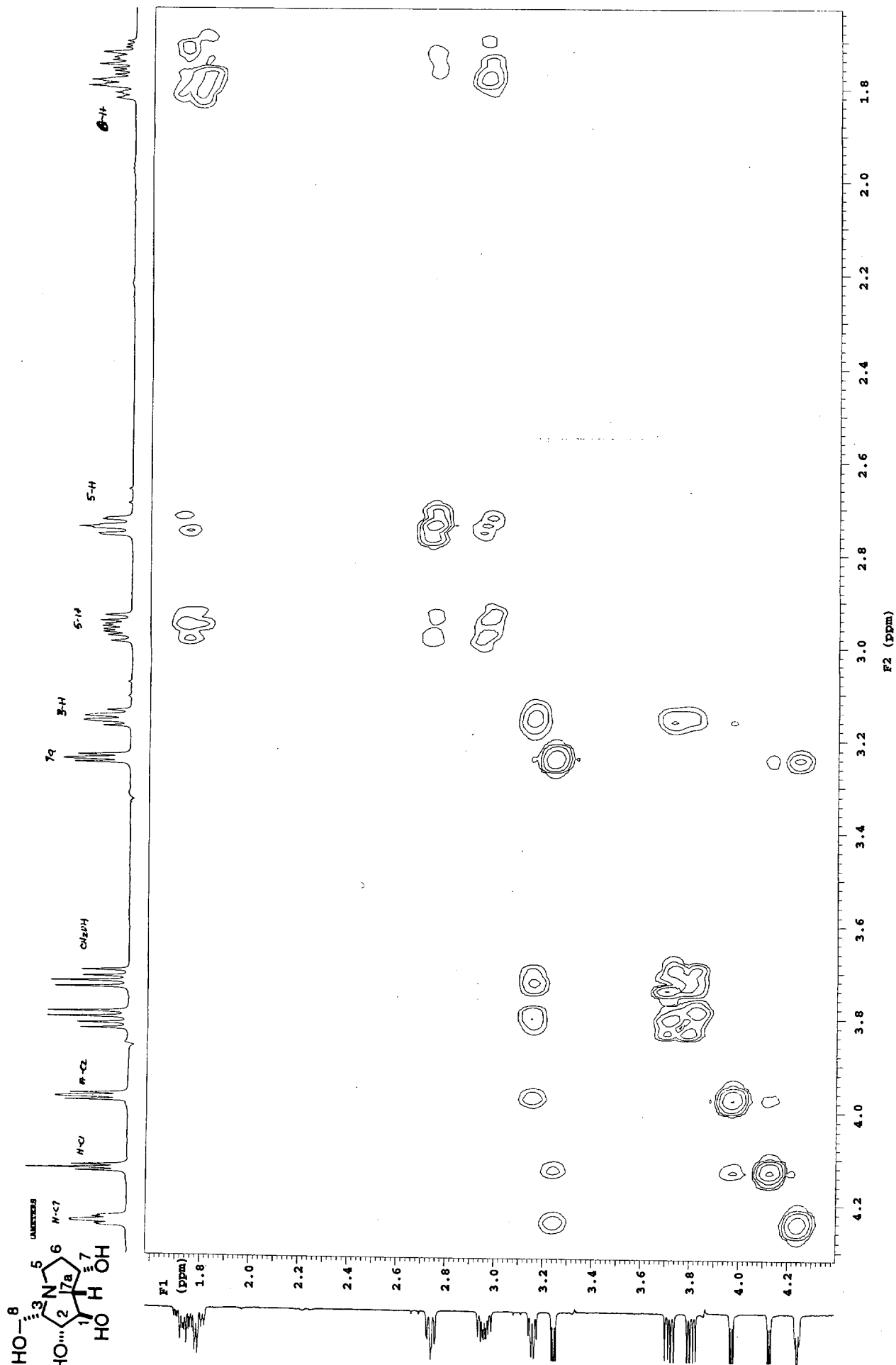
13C OBSERVE

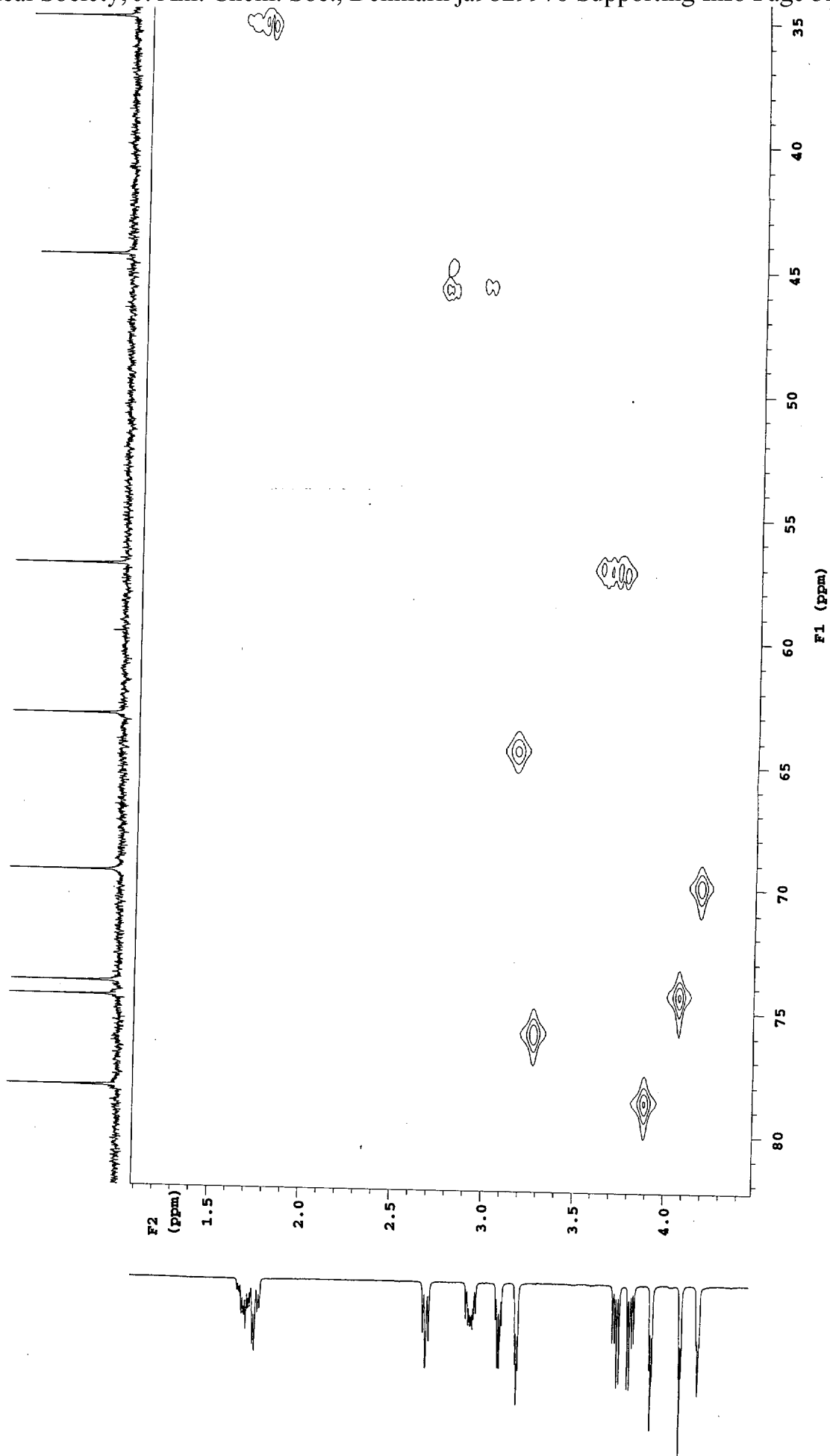
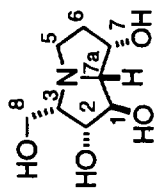
exp1 std13c

SAMPLE DEC. & VT
 date Aug 1 98 dn H1
 solvent D2O dof -1094.4
 file /export/b-dm Y77
 csm/userid/data/ms-dm w
 rtiborough/csm-04-dmf 6944
 .3-spl.13c.1 dpmr 46

ACQUISITION PROCESSING
 sfrq 100.573 lb 1.00
 tn C13 wfile
 at 1.311 proc ft
 np 31552 fn not used
 sw 12037.3 math f
 fb 6600
 bs 16 werr
 tpwr 56 wexp
 pw 10.0 wbs
 qf 1.000 wnt
 tof -3574.7 DISPLAY -6.8
 nt 10000 sp 12037.3
 ct 5156 wp 80
 elook n vs
 gain not used sc 0
 FLAG wc 400
 il n hnm 48.15
 in n is 500.00
 dp y rfi 7751.2
 bs mn rfp 7744.4
 th 20
 ins 1.000
 mn ph





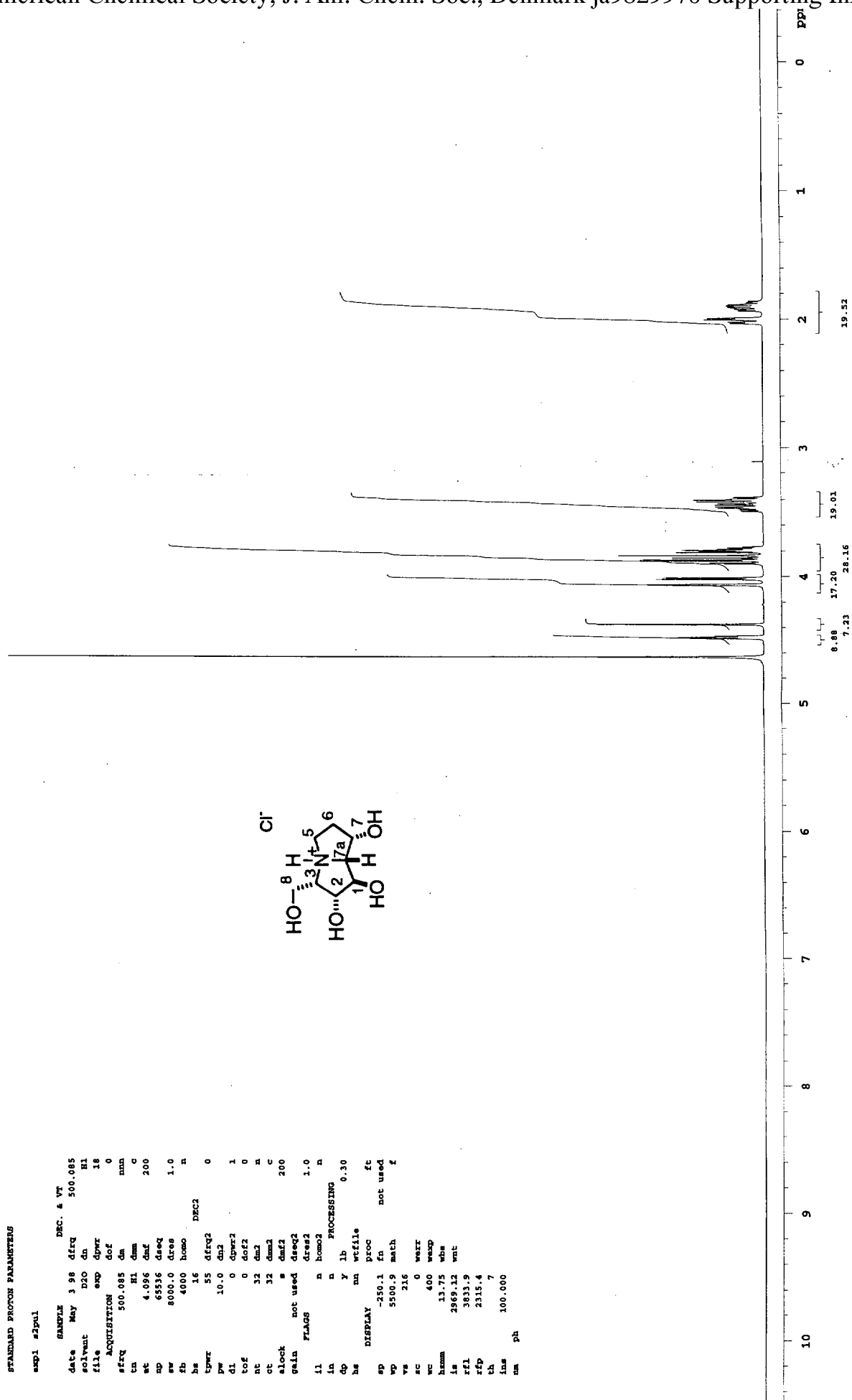
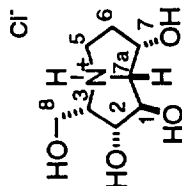


**^1H NMR, ^{13}C NMR, COSY, and HETCOR for
(+)-3-epiaustraline hydrochloride ((-)-48)**

STANDARD PROTON PARAMETERS

exp1 #2jul

SAMPLE DEC. & VT
 date May 3 98 dfrq 500.085
 solvent D2O dn H1
 file 18
 exp dpr 0
 Acquisition
 dfrq 500.085 dm nm
 tn H1 dm c
 at 4.096 dmf 200
 np 65536 dseq
 sw 8000.0 dres 1.0
 zb 4000 homo n
 bs 16 DEC2
 tpr 55 dfrq2 0
 pr 10.0 dm2 1
 dl 0 dpr2 1
 tof 0 daf2 0
 nt 32 dm2 n
 ct 32 dm2 c
 alock s dm2 200
 gain not used dseq2
 FLAGS dres2 1.0
 il n homo2 n
 in n PROCESSING
 qp Y lb 0.30
 bs nn wrfile
 DISPLAY -250.1 fn proc ft
 wp 5500.9 math not used f
 vs 216
 sc 0 verr
 wc 400 weop
 hnm 13.75 whs
 is 2969.12 wnt
 rfl 3833.9
 rfp 2315.4
 th 7
 ins 100.000
 nm ph



STANDARD CARBON PARAMETERS

exp2 s3pm1

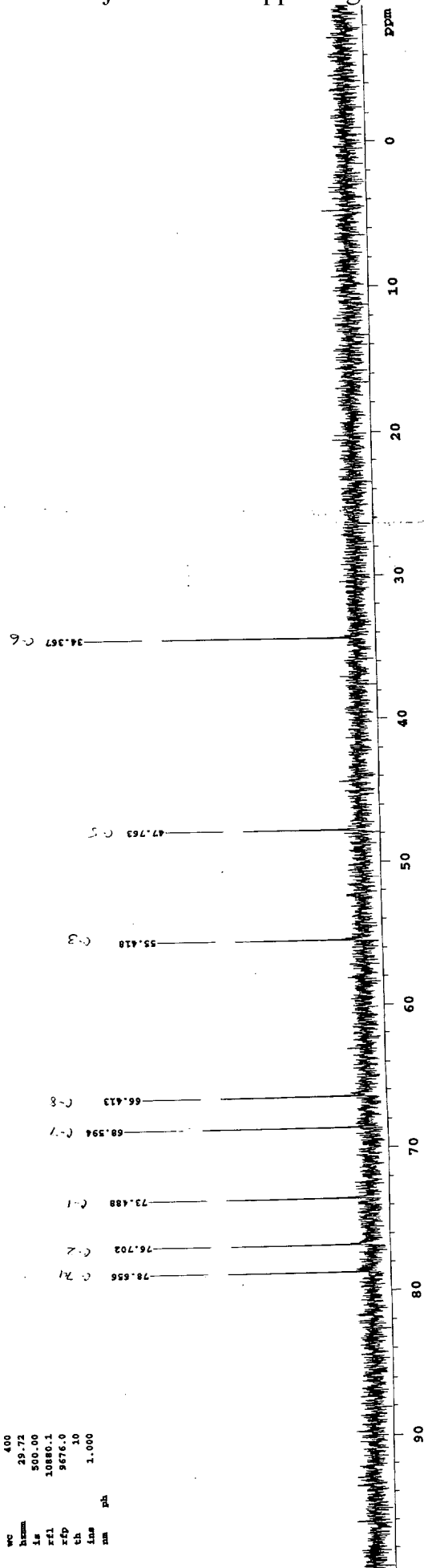
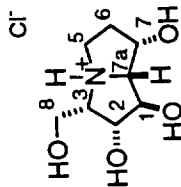
SAMPLE DEC. 4 VT
 date May 3 98 dfreq 499.699
 solvent D2O dn H1
 file /export/home/-dqrwr 43
 data/u500/martinbo- dof -829.0
 rough/eam.04.19.13- dm YYY
 C.1 dm W
 11053

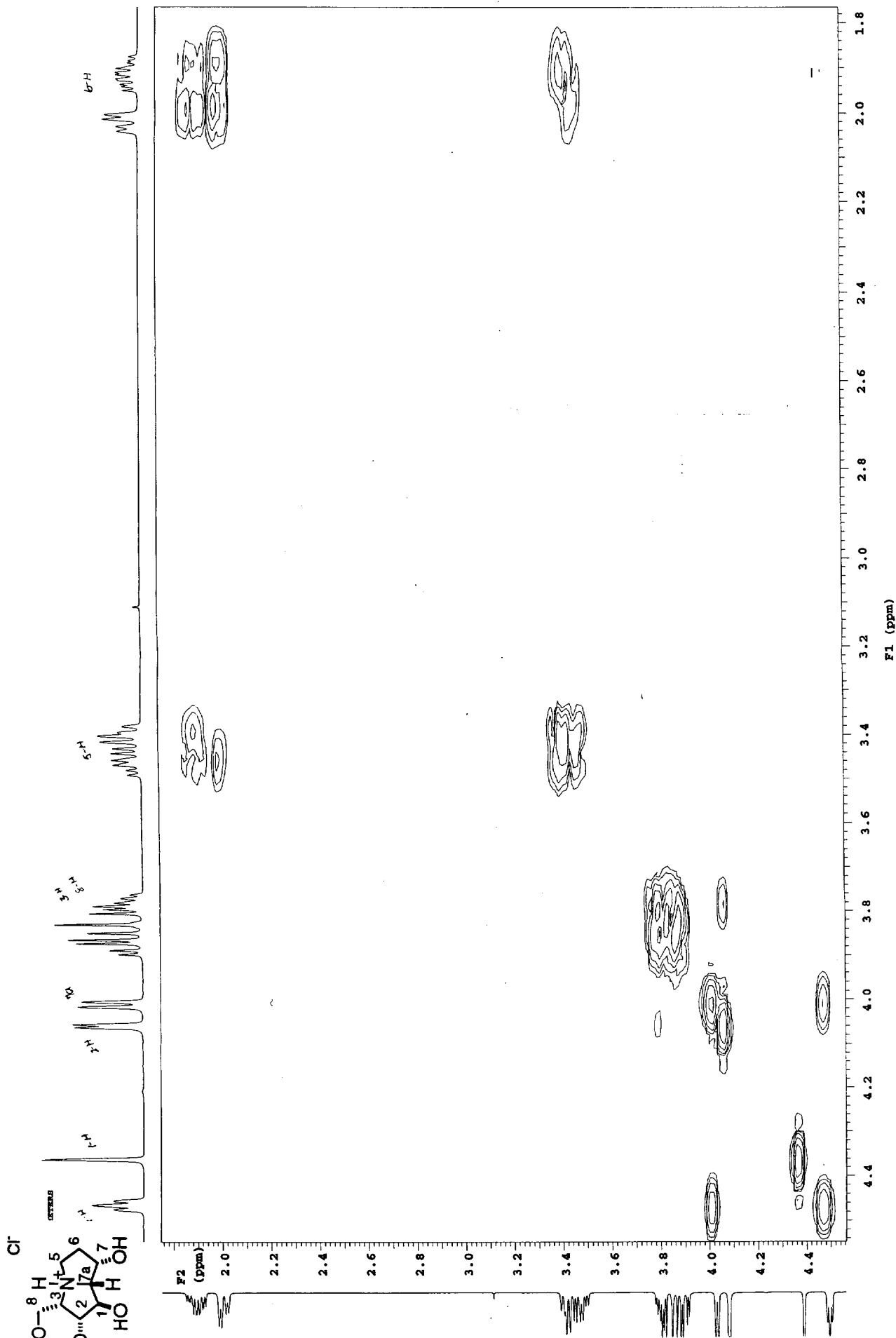
ACQUISITION C.1 dmf 11053
 afreq 123.655 dseq
 tn C13 dres 1.0
 at 1.086 homo n
 np 29824
 sw 13726.8 lb PROCESSING 1.00
 fb 7600 wfile ft
 bs 16 proc 1 fn not used
 as 54 math
 tpr 10.0
 dl 1.000 weir
 tof -6232.5 wexp
 at 100000 wha
 ct 2324 wnt

alock n
 gain not used
 FLOPS

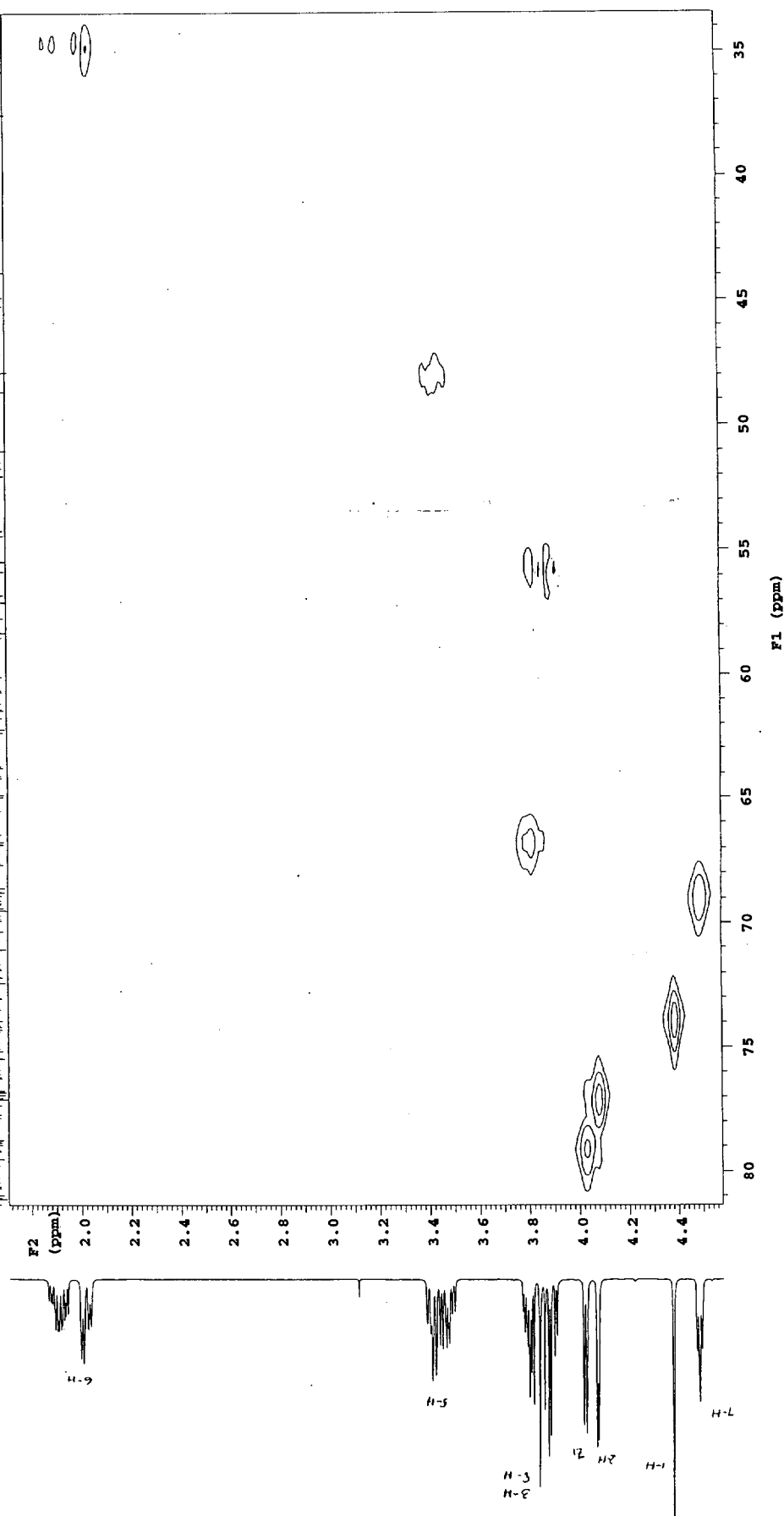
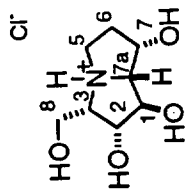
il n
 in n
 dp y
 bs m

DISPLAY
 sp -1204.1
 wp 13726.8
 vs 50
 ac 0
 wc 400
 hnm 29.72
 ls 500.00
 rti 10886.1
 xfp 9676.0
 th 10
 ins 1.000
 nm ph





STANDARD PROTON PARAMETERS

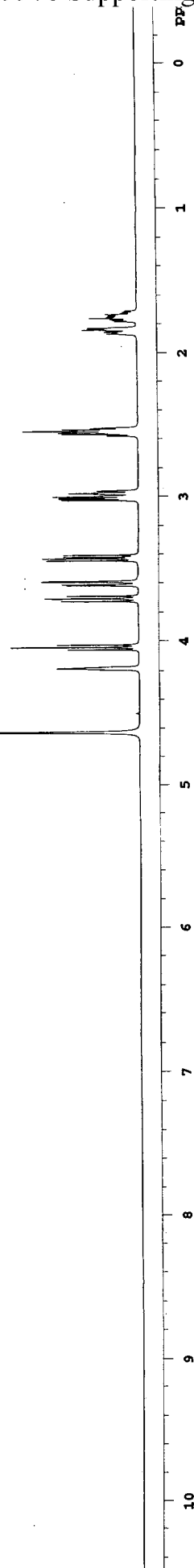
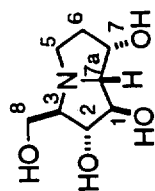


^1H NMR, ^{13}C NMR, COSY, and HETCOR for
(+)-australine ((+)-**3**)

STANDARD PROTON PARAMETERS

exp1 s2jul

SAMPLE DEC. & VT
 date Jul 29 1998 dfrq 500.081
 #solvent D2O dn 18
 file exp dpr 0
 ACQUISITION dof 0
 sfrq 500.081 dm nm
 tn H1 dm c
 at 4.096 dmf 200
 sw 65536 dseq 1.0
 sb 8000.0 dres
 fb 4000 h.no n
 bs 16 DEC2
 tpwr 55 dfrq2 0
 pw 7.1 do2
 dl 0 dpr2 1
 tof 0 dof2 0
 nt 32 dm2 n
 ct 32 dm2 c
 alock s dm2 200
 gain not used dseq2
 flags dres2 1.0
 al n home2 n
 in n PROCESSING
 qp y lb 0.30
 bs mm wfile
 DISPLAY proc ft
 ap -250.1 fn not used
 wp 5500.7 math f
 va 162
 sc 0 weyr
 wc 400 wecp
 hzmm 22.00 whs
 ls 3418.45 wnt
 rfi 3832.1
 rfp 2315.4
 th 7
 ins 100.000
 mm ph



13C OBSERVE

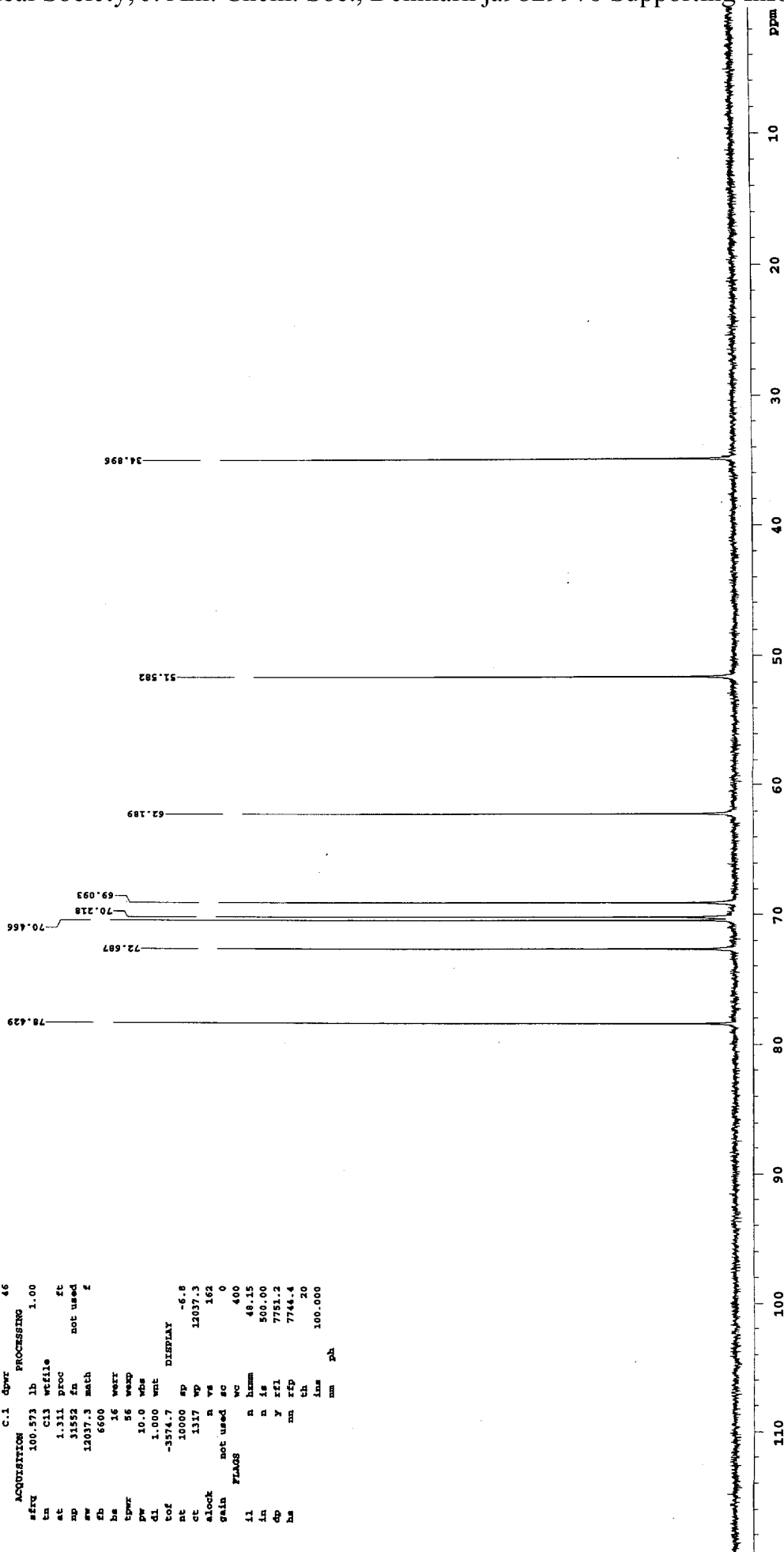
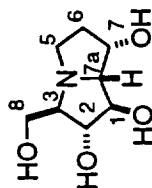
exp1 std13c

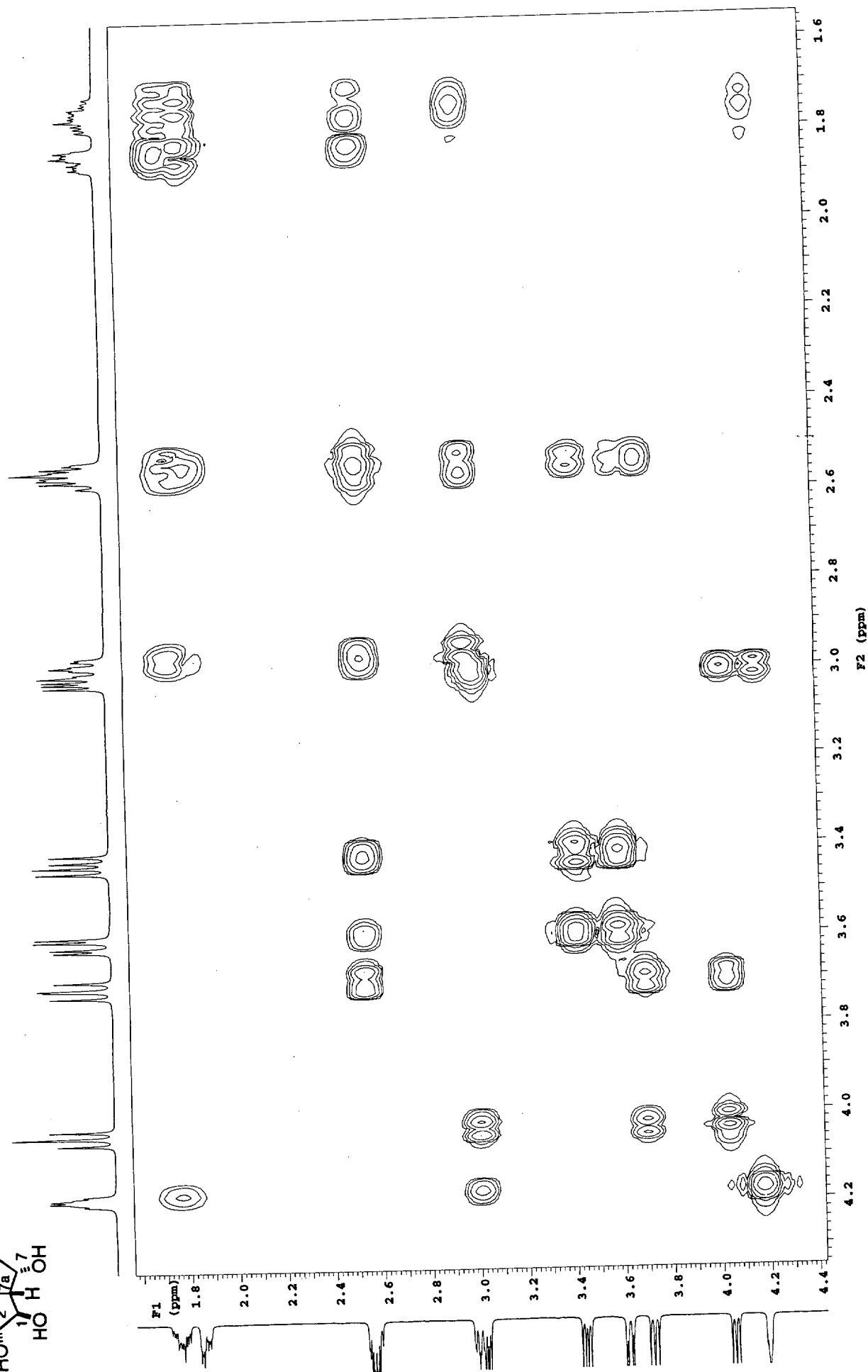
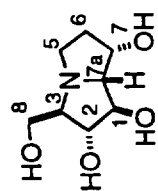
SAMPLE DEC. A VT H1
 date Jul 30 98 dn
 solvent D2O dof -1094.4
 file /export/home/- dm YYY
 data/u400/martino- dm w
 rough/sem.04.47.13- dm 6944

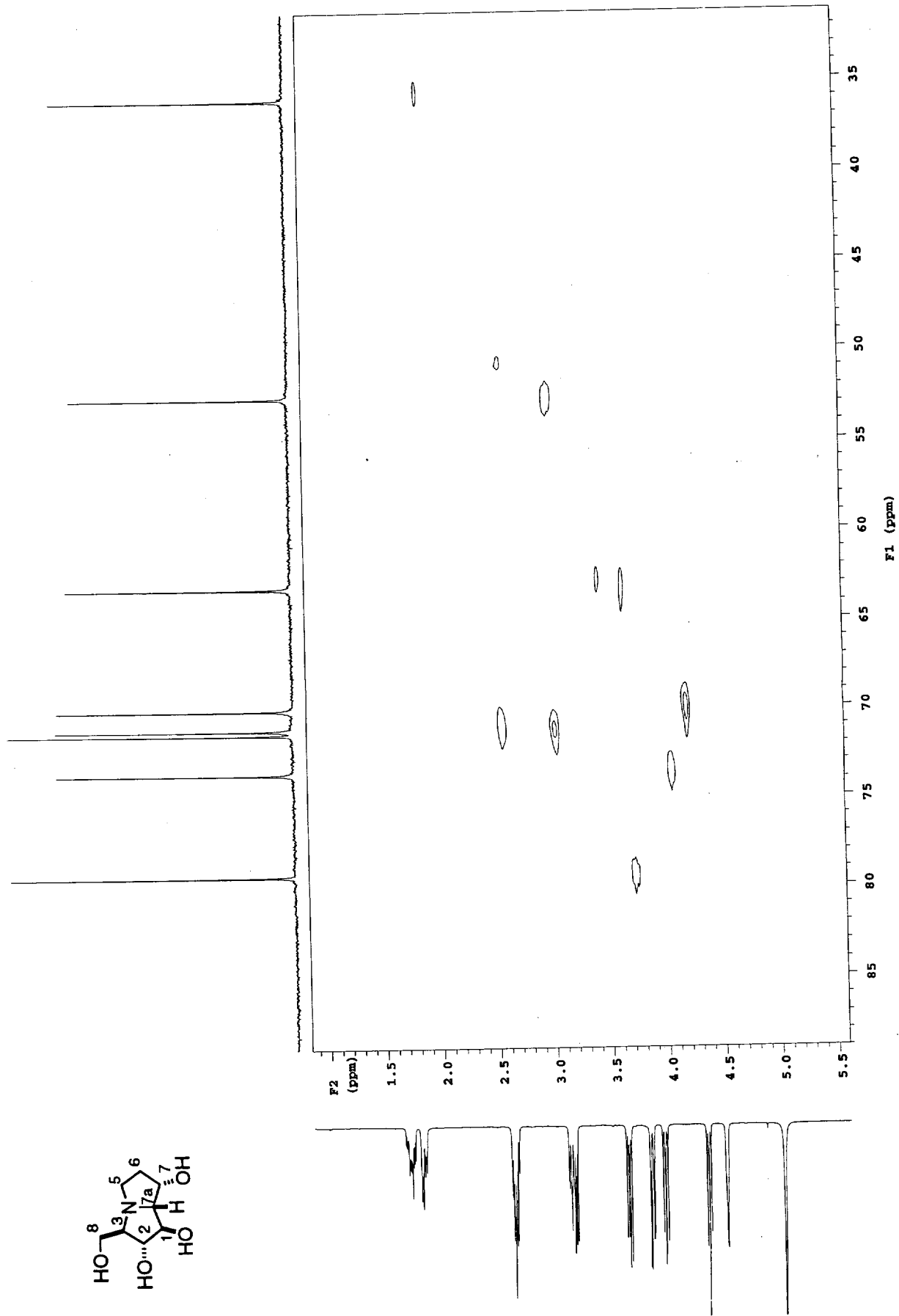
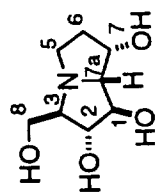
C.1 qprc 46

ACQUISITION PROCESSING

sfreq 100.573 lb 1.00
 tn C13 vfile
 at 1.311 proc ft
 ap 31552 fn not used f
 sr 12037.3 math
 fb 6600
 bs 16 werr
 tpwr 56 wexp
 pw 10.0 wbs
 dl 1.000 wnt
 tof -3574.7 DISPLAY
 nt 10000 sp -6.8
 ct 1317 wp 12037.3
 alook n vs 162
 gain not used sc 0
 FLAG03 vc 400
 il n hnm 48.15
 in n fs 500.00
 qp y xfl 7751.2
 bs nm rfp 7744.4
 th 20
 lms 100.000
 nm ph







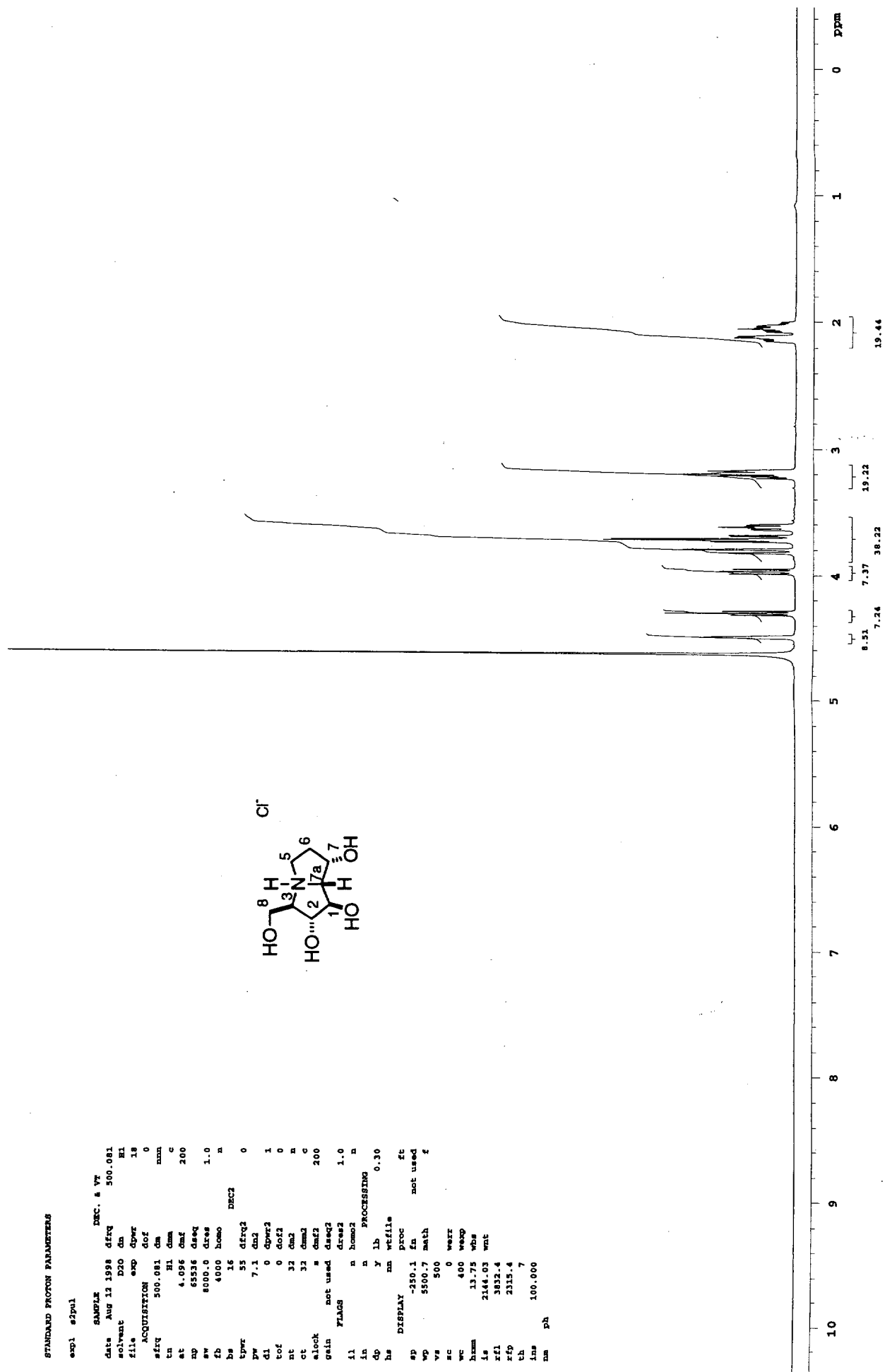
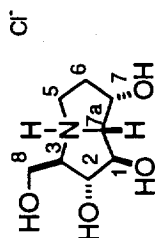
**¹H NMR, ¹³C NMR, COSY, and HETCOR for
(+)-australine hydrochloride ((+)-53)**

STANDARD PROTON PARAMETERS

```

exp1 s2pul
SAMPLE
date Aug 12 1998 dfrq DEC. & VT 500.081
solvent D2O dn H1
file exp dpr 18
ACQUISITION dof 0
sfrq 500.081 dm nmn
tn H1 dm c
at 4.056 dmf 200
ap 65336 dseq
av 8000.0 dres 1.0
fb 4000 homo n
bs 16 DEC2
tpr 55 dfrq2 0
pw 7.1 dm2
d1 0 dpr2 1
tof 0 dof2 0
nt 32 dm2 n
ct 32 dm2 c
elock n dm2 200
gain not used dseq2
PLAGS n dm2 1.0
fl n homo2 n
in n lb PROCESSING 0.30
bs nm wtfile
DISPLAY proc ft
sp -250.1 fn not used
wp 5500.7 math f
vs 500
sc 0 warr
wc 400 wexp
hnm 13.75 wbs
ls 2144.03 wnt
rf1 3832.4
rfp 2315.4
th 7
fns 100.000
na ph

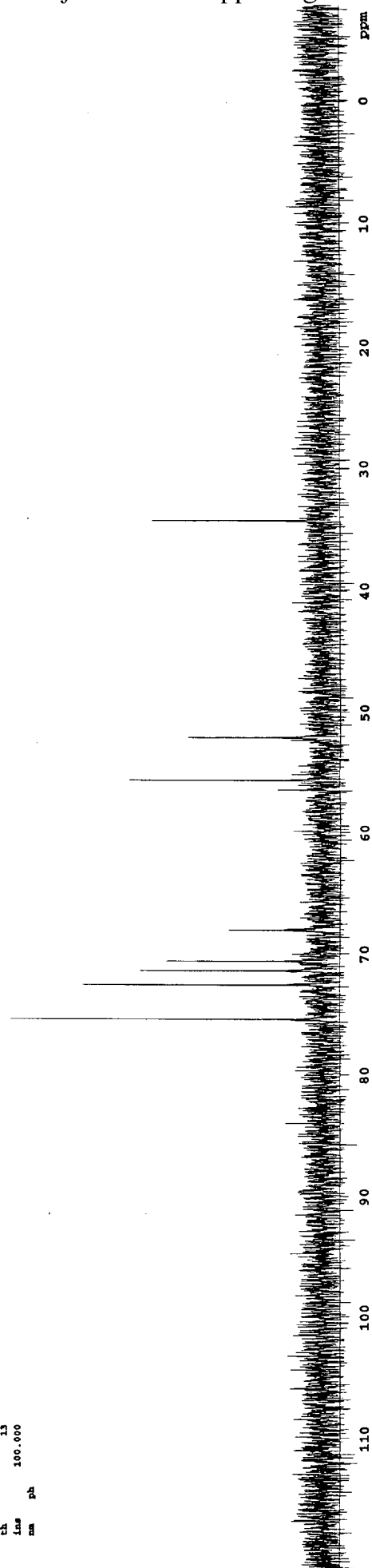
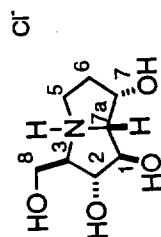
```



STANDARD CARBON PARAMETERS

exp2 s2pul

SAMPLE DEC. & YR
 date Aug 12 98 dfrq 499.699
 solvent D2O dn H1
 file /export/home/- dgr 41
 data/u300/martinbo- dof -828.3
 rough/aaa.04.48.13- dm 777
 C.1 dm w
 ACQUISITION dmf 11190
 srfq 125.456 dseq
 tn C13 dres 1.0
 at 1.086 homo n
 up 35136 PROCESSING
 av 16174.7 lb 1.00
 ch 9000 wfile
 bs 16 proc ft
 ss 1 fn not used f
 tpr 54 math
 pw 20.0
 dl 1.000 warr
 tof -4809.8 wexp
 nt 10000 wba
 ct 1503 wnt
 alock n
 gain not used
 FLAGS
 il n
 in n
 dp x
 bs nm
 DISPLAY
 sp -985.2
 wp 16174.7
 vs 80
 sc 0
 wc 400
 hnm 56.16
 ls 500.00
 fl 10661.2
 xfp 9676.0
 th 13
 lns 100.000
 nm ph



Cl⁻

