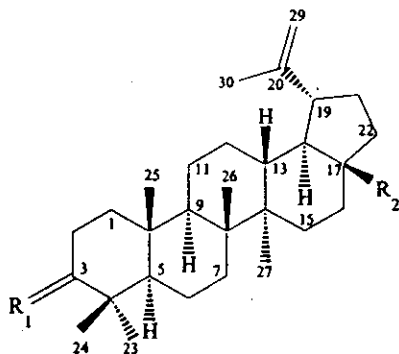


บทคัดย่อ

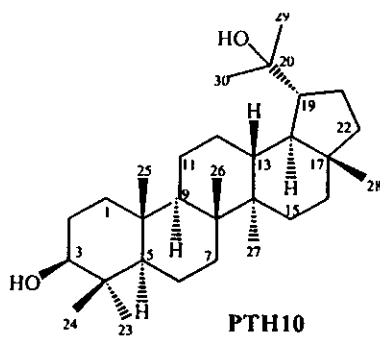
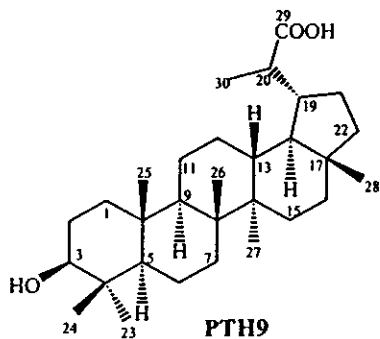
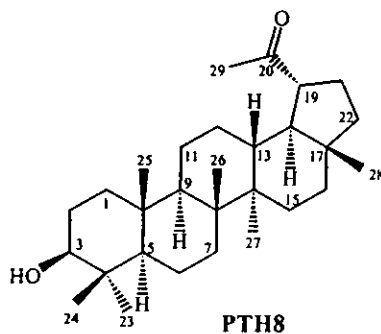
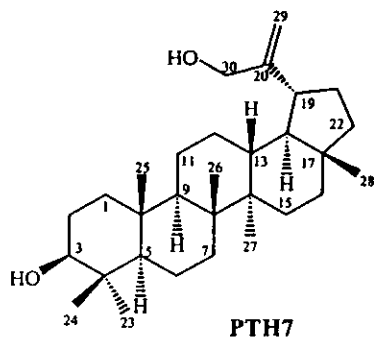
แยกส่วนสกัดหยาบเฮกเซน และ เมทิลีนคลอไรด์ของใบ โปรงขาว ได้สารประกอบไตรเทอร์พีนประเภทลูเพน เป็นสารใหม่ 3 สาร คือ 3β -(3',7'-dihydroxy)dihydrocinnamoyllupeol (PTH13), 3β -(E)-feruloyllupeol (PTH14) และ 3β -(Z)-feruloyllupeol (PTH15) นอกจากนี้ยังพบสารที่มีการรายงานแล้ว 22 สาร ซึ่งแบ่งเป็นสารประกอบไตรเทอร์พีนประเภทลูเพน 15 สาร [lupeol (PTH1), lupenone (PTH2), betulin (PTH3), betulin aldehyde (PTH4), betulinic acid (PTH5), 3-*epi*-betulinic acid (PTH6), lup-20(29)-en- 3β ,30-diol (PTH7), 30-nor-lupan- 3β -ol-20-one (PTH8), 3β -hydroxylupan-29-oic acid (PTH9), 3β ,20-dihydroxylupane (PTH10), 3β -(E)-coumaroyllupeol (PTH11), 3β -(Z)-coumaroyllupeol (PTH12), 3β -(E)-feruloylbetulin (PTH16), 3β -(E)-caffeoyllupeol (PTH17) และ 3β ,28,30-lup-20(29)-ene-triol (PTM1)] สารประกอบนอร์เซสควิเทอร์พีน 2 สาร [blumenol A (PTM2) และ dehydrovomifoliol (PTM3)] สารประกอบประเภทลิคแนน 1 สาร [lyoniresinol (PTM4)] สารผสมของ oleanolic acid (PTH18) และ ursolic acid (PTH19) และสารผสมของ β -sitosterol (PTH20) และ stigmasterol (PTH21)

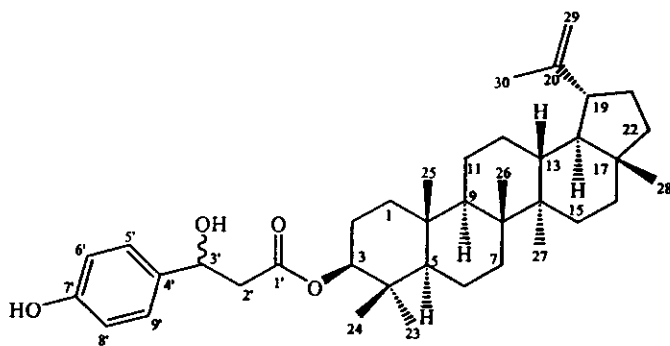
โครงสร้างของสารประกอบเหล่านี้วิเคราะห์โดยใช้ข้อมูลทาง สเปกโทรสโกปี สำหรับสารประกอบ PTH9 ยืนยันโครงสร้างด้วยข้อมูลทางเอ็กซ์เรย์



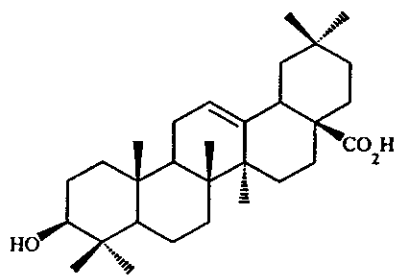
	R ₁	R ₂
PTH1:	H, β -OH	CH ₃
PTH2:	O	CH ₃
PTH3:	H, β -OH	CH ₂ OH
PTH4:	H, β -OH	CHO
PTH5:	H, β -OH	COOH
PTH6:	H, α -OH	COOH

	R ₁	R ₂
PTH11:	H, β -O-(<i>E</i>)-coumaroyl	CH ₃
PTH12:	H, β -O-(<i>Z</i>)-coumaroyl	CH ₃
PTH14:	H, β -O-(<i>E</i>)-feruloyl	CH ₃
PTH15:	H, β -O-(<i>Z</i>)-feruloyl	CH ₃
PTH16:	H, β -O-(<i>E</i>)-feruloyl	CH ₂ OH
PTH17:	H, β -O-(<i>E</i>)-caffeoyl	CH ₃

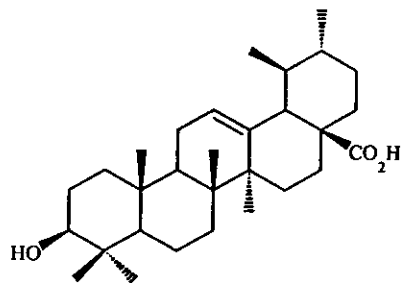




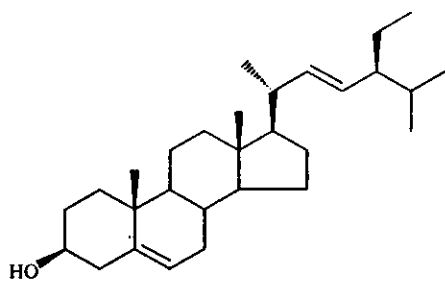
PTH13



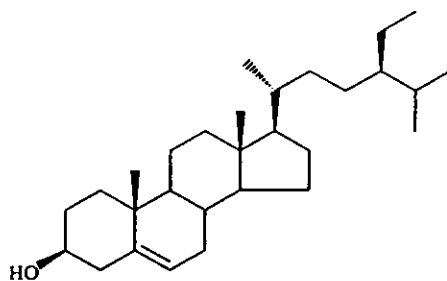
PTH18



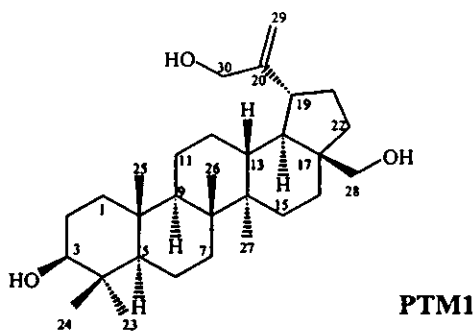
PTH19



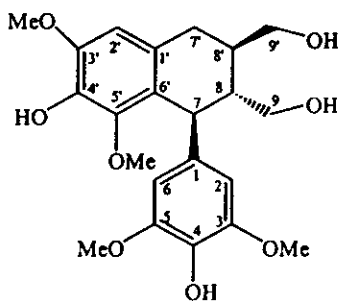
PTH20



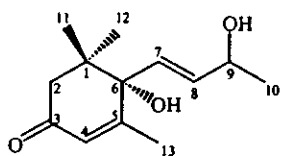
PTH21



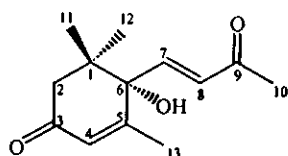
PTM1



PTM4



PTM2

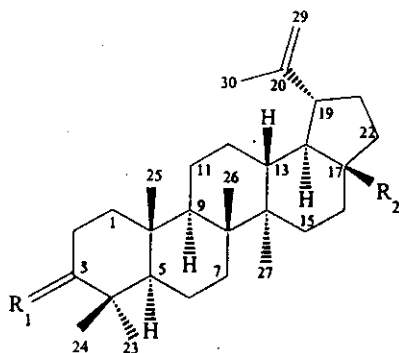


PTM3

ABSTRACT

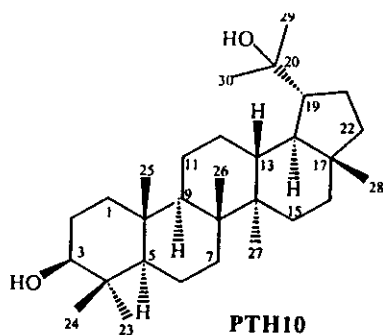
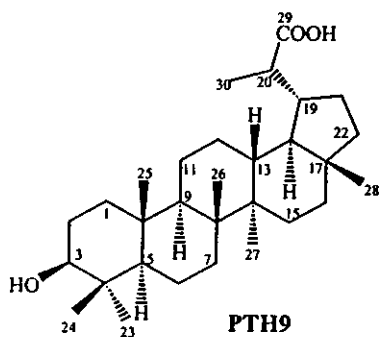
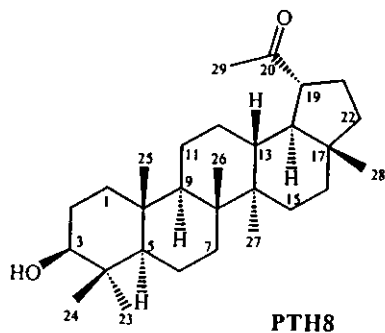
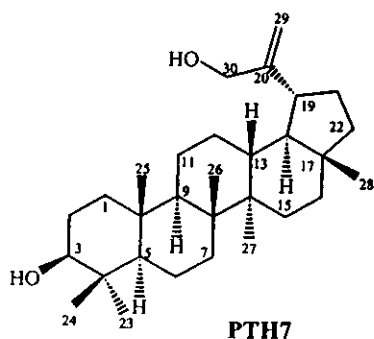
Investigation of the hexane and methylene chloride extracts of the leaves of *Ceriops decandra* (Griff.) Ding Hou resulted in three new lupane triterpenoids: 3β -(3',7'-dihydroxy)dihydrocinnamoyllupeol (PTH13), 3β -(*E*)-feruloyllupeol (PTH14) and 3β -(*Z*)-feruloyllupeol (PTH15), together with twenty-two known compounds: fifteen lupane triterpenoids [lupeol (PTH1), lupenone (PTH2), betulin (PTH3), betulin aldehyde (PTH4), betulinic acid (PTH5), 3-*epi*-betulinic acid (PTH6), lup-20(29)-en- 3β ,30-diol (PTH7), 30-nor-lupan- 3β -ol-20-one (PTH8), 3β -hydroxylupan-29-oic acid (PTH9), 3β ,20-dihydroxylupane (PTH10), 3β -(*E*)-coumaroyllupeol (PTH11), 3β -(*Z*)-coumaroyllupeol (PTH12), 3β -(*E*)-feruloylbetulin (PTH16), 3β -(*E*)-caffeoyllupeol (PTH17) and 3β ,28,30-lup-20(29)-ene-triol (PTM1)], two norsesquiterpenoids [blumenol A (PTM2) and dehydrovomifoliol (PTM3)], one lignan [lyoniresinol (PTM4)], a mixture of oleanane and ursane [oleanolic acid (PTH18) and ursolic acid (PTH19)] and a mixture of two steroids [β -sitosterol (PTH20) and stigmasterol (PTH21)].

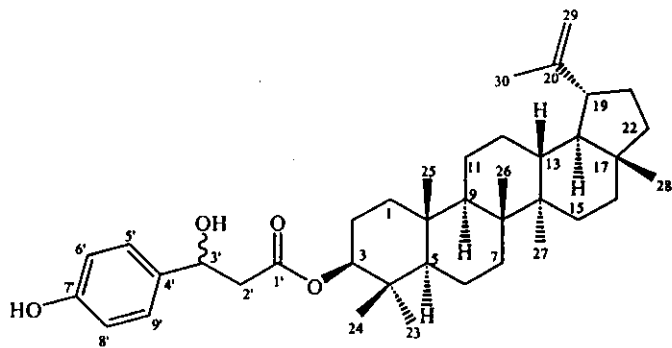
Their structures were elucidated by spectroscopic methods. The structure of PTH9 was additionally confirmed by X-ray diffraction.



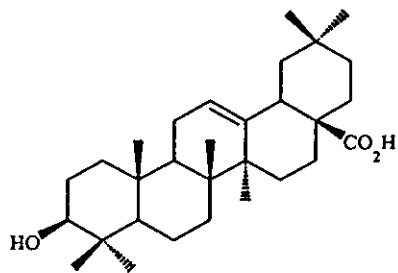
	R ₁	R ₂
PTH1:	H, β -OH	CH ₃
PTH2:	O	CH ₃
PTH3:	H, β -OH	CH ₂ OH
PTH4:	H, β -OH	CHO
PTH5:	H, β -OH	COOH
PTH6:	H, α -OH	COOH

	R ₁	R ₂
PTH11:	H, β -O-(<i>E</i>)-coumaroyl	CH ₃
PTH12:	H, β -O-(<i>Z</i>)-coumaroyl	CH ₃
PTH14:	H, β -O-(<i>E</i>)-feruloyl	CH ₃
PTH15:	H, β -O-(<i>Z</i>)-feruloyl	CH ₃
PTH16:	H, β -O-(<i>E</i>)-feruloyl	CH ₂ OH
PTH17:	H, β -O-(<i>E</i>)-caffeoyl	CH ₃

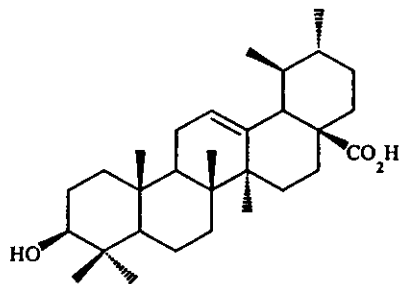




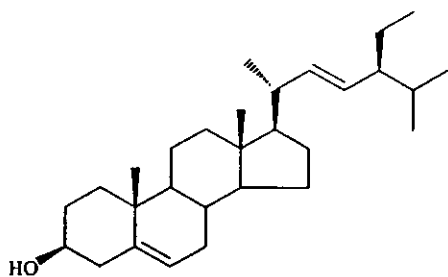
PTH13



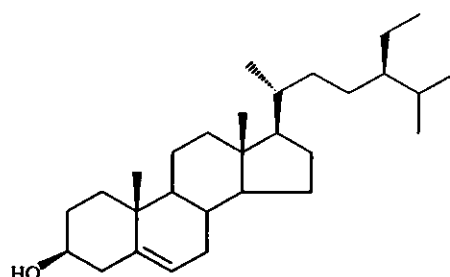
PTH18



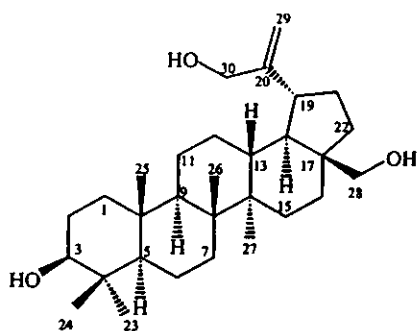
PTH19



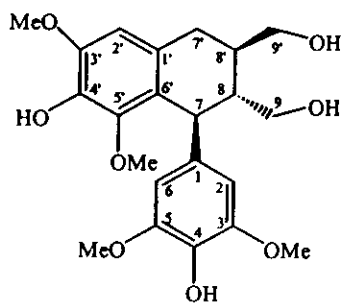
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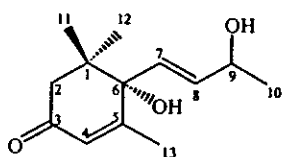
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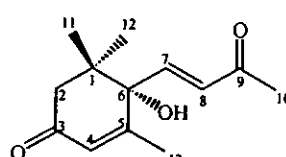
PTM1



PTM4



PTM2



PTM3