CHAPTER V

CONCLUSION

In present investigation, from the rhizome of *Belamcanda chinensis* (L.) DC. three new phenolic compounds , namely, belamphenone **[419]**, belalloside A **[420]** and belalloside B **[421]** were isolated along with 13 known compounds. These known compounds are tectorigenin **[14]**, irisflorentin **[7]**, irigenin **[5]**, irilin D **[412]**, tectoridin **[13]**, iristectorin B **[413]**, iristectorin A **[414]**, iridin **[4]**, hispiduloside **[415]**, jaceoside **[416]**, androsin **[417]**, iriflophenone **[418]** and resveratrol **[57]**. Chemical examination of the heartwood of *Dalbergia parviflora* Roxb. led to the isolation of five new isoflavones, namely, khrinone A-E **[424, 432, 437, 439** and **441]**, a new isoflavan, namely, khriol A **[422]**, a new isoflavanone, namely, dalparvin **[438]**, and two dihydroflavonol, namely, dalparvinol A **[436]** and dalparvinol B **[440]**, together with 32 known flavonoids, *i.e.* mucronulatol **[77]**, 7-demethylrobustigenin **[423]**, 3′-methoxyviolanone **[197]**, onogenin **[252]**, sativanone **[175]**, pinocembrin **[174]**, biochanin A **[95]**, hydroxyobtustyrene **[355]**, 2′-methoxybiochanin A **[425]**, (6a,11a)-3,8-dihydroxy-9-methoxypterocarpan **[426]**, 8-demethylduartin **[429]**, pinobanksin **[428]**, secundiflorol H **[429]**, 7,3′-dihydroxy-4′-methoxyisoflavanone **[430]**, violanone **[177]**, arizonicanol A **[431]**, tectorigenin **[14]**, vestitone **[176]**, pratensein **[433]**, 2′-methoxyformononetin **[434]**, formononetin **[72]**, vestitol **[78]**, xenognosin **[435]**, 5′-methoxyvestitol **[183]**, 3′-methoxydaidzein **[196]**, calycosin **[81]**, theralin **[442]**, naringenin **[251]**, genistein **[3]**, liquiritigenin **[84]**, isoliquiritigenin **[83]**, and bowdichione **[443]**. Tectorigenin **[14]** and tectoridin **[13]** major constituents from *B. chinensis* showed strong stimulatory activity concerning cell proliferation in both MCF-7 and T47D cells, along with their high luciferase inducing activity in both MCF-7/Luc and T47D/Luc cells were observed. Almost all flavonoid compounds isolated from *D. parviflora*, except isoflavans showed high stimulatory activities against both cells and showed high increase in luciferase induction against both transfected cells. Genistein **[3]** showed highest estrogenic activities on both assays, including formononetin **[72]**, khrinone D **[439]**, biochanin A **[95]**, theralin **[442]**, naringenin **[251]**, liquiritigenin **[84]**, (6a,11a)-3,8-dihydroxy-9-methoxypterocarpan **[426]**, isoliquiritigenin **[83]** and xenognosin **[435]**.