***Dear Editor,***

We deeply appreciate reviewers’ suggestions and comments on the manuscript. We have made necessary corrections to our submission and sending you a revised manuscript following reviewer’s comments. Two files of revised MS are attached, one file with track changes and the other with accepted changes. Some of the corrections led to a change in the line numbers.

Below are the answers to reviewers’ comments:

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| **Reviewer 1 comments** | **Authors answers** |
| Table 1. The lignans isolated from *Artemisia* speciesThe lignans listed by names in Table 1 should also be designated using (bold) numerals same as those in Fig. 2. The numerals should also be used throughout the text to refer to the particular compound. | The names of the compounds in Table 1 were replaced by numbers equal to those in Figure 2. Throughout the manuscript, in addition to the name of the compound in parentheses is given a number equal to the number on Figure 2. |
| Table 2. Since the manuscript deals with *Artemisia* there is no need to present analytical techniques for isolation of lignans from other genera (*Magnolia*, *Ocotea* and *Sesamum*)” | Deleted.  |
| The whole paper needs a careful editing of the English language. | Checked. |

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| **Reviewer 2 comments** | **Authors answers** |
| **Page 1, Line 9:** Instead of “sources, play”should be: “sources play” | Corrected. |
| **Page 2, Line 36:** Instead of “Astraceae”should be: “Asteraceae” | Corrected. |
| **Page 3, Line 69:** Instead of “Arglabin, a guaianolide type of sesquiterpene lactones,”should be: “Arglabin, a guaianolide type sesquiterpene lactone,” | Corrected. |
| **Page 6:** In the Table 1 instead of “Caruligan A, Carulignan B”should be: “Carulignan A, carulignan B”. | According to the instructions of other reviewer names of the lignans in the table are replaced with numbers given in bold on the figure 2. |
| **Pages 6, 7, …:** In the Table 1, in Fig. 2 and through the text that follows, the names aschantin and ashantin occur. Please, clarify whether they are two compounds or one compound with two names. The same goes for epiaschantin and epiashantin. Based on this, the structures of the corresponding compounds show in Fig. 2 (Page 7). | Aschantin and ashantin are the synonyms, and we thought it better to leave them in the form in which they appear in the original article. That the two names are synonymous is emphasized in Figure 2. Given the more frequent use of the name aschantin that name was used in the corrected manuscript. The same is true for epiashcanitn. |
| **Page 8, Lines 147–151:** Instead of “Subsequent steps hydroxylation of cinnamic acid by cinnamate 4-hydroxylase, which leads to biosynthesis of p-coumaric acid and activation of coumaric acid by 4-coumaroyl CoA-ligase, which leads to biosynthesis of p-coumaroyl-CoA, are mandatory and provide the basis for all subsequent branches and resulting metabolites113,114.” should be: “Subsequent steps, i.e. hydroxylation of cinnamic acid by cinnamate 4-hydroxylase which leads to biosynthesis of p-coumaric acid and activation of coumaric acid by 4-coumaroyl CoA-ligase which leads to biosynthesis of p-coumaroyl-CoA, are mandatory and provide the basis for all subsequent branches and resulting metabolites113,114.”. | Corrected. |
| **Page 8, Line 156:** Instead of “are an abundant”should be: “are abundant”. | Corrected. |
| **Page 8, Lines 157–159:** Instead of “During the years, the majority of the studies were devoted to understanding the biosynthesis of podophyllotoxin. The biosynthesis of lignans with 9(9′)-oxygen is very well studied.”should be: “During the years, the majority of the studies were devoted to understanding the biosynthesis of podophyllotoxin, thanks to which the biosynthesis of lignans with 9(9′)-oxygen is very well studied.” | Corrected. |
| **Page 8, Line 168:** Instead of “lignin” should be: “lignan”. | Corrected. |
| **Page 9, Line 185:** Instead of “O methyltransferase”should be: “O-methyltransferase”. | Corrected. |
| **Page 12, Line 224:** Instead of “‘‘pre-extraction’’”should be: ““pre-extraction””. | Corrected. |
| **Pages 14–15, In the Table 2**:instead of *A. absinthium* Fresh roots sesartemin, (+)-episesartemin A, (+)-episesartemin B, (+) diasesartemin    Petrol (60-80°C): diethyl ether, 2:1Chromatography: resin was dissolved in ether, TLC on silica gel with ether:petrol (4:1). Fractionation: silica gel column (petrol:ether, ether 0→100% and CH3OH:ether, 3:10%). The lignan containing fractions (ether-CH3OH:ether, 50%-10%) were also subjected to preparative TLC. 92Should be: *A. absinthium* Fresh roots     Sesartemin, (+)-episesartemin A, (+)-episesartemin B, (+)-diasesartemin    Petrol (60–80°C):ether, 2:1Chromatography: resin was dissolved in ether, TLC on silica gel with ether:petrol, 4:1.Fractionation: silica gel column (petrol:ether 100:0→0:100% and CH3OH:ether, 3:97→10:90%). The lignan containing fractions (petrol:ether–CH3OH:ether, 50%–10%) were also subjected to preparative TLC. 92instead of: *A. caruifolia* Buch-Ham. ex Roxb.     Aerial parts     Sesamin, sesartemin, caruilignan A, caruilignan B, caruilignan C, caruilignan D     Refluxing (methanol). Methanol extract was partitioned with CHCl3 and H20     Chromatography (CHCl3 extract): silica gel column (hexane:ethyl acetate, 7:3→3:1 and ethylacetate:ethanol:H20, 6:2:1), gives 4 fractionsOpen column chromatography (fraction 1) with 60-100% methanol gives 3 sub-fractions. Preparative TLC (sub-fractions): SiO2, benzene:acetone, 9:1 gives sesamin and sesartemin. Open column chromatography (fraction 2 and 3) with 40-60% methanol. HPLC preparative chromatography of sub-fractions gives caruilignans. 97should be: *A. caruifolia* Buch-Ham. ex Roxb.     Aerial parts     Sesamin, sesartemin, caruilignan A, caruilignan B, caruilignan C, caruilignan D     Refluxing(methanol). Methanol extract was partitioned with CHCl3 and H20 Chromatography (CHCl3 extract): silica gel column (hexane:ethyl acetate, 7:3→3:1 and ethylacetate:ethanol:H20, 6:2:1), gives 4 fractions. Open column chromatography (fraction 1) with 60–100% methanol gives 3sub-fractions. Preparative TLC (sub-fractions): SiO2, benzene:acetone, 9:1 gives sesamin and sesartemin. Open column chromatography (fraction 2 and 3) with 40–60% methanol. HPLC preparative chromatography of sub-fractions gives caruilignans. 97 | Corrected.  |
| **Page 16, Line 263:** Instead of “enterolactone, which” should be: “enterolactone which”. | Corrected. |
| **Page 16, Line 273:** Instead of “magnolin, as a” should be: “magnolin as a”. | Corrected. |
| **Page 16, Line 278:** Instead of “as well as, the”should be: “as well as the”. | Corrected. |
| **Page 17, Line 292:** Instead of “*Agrostis Stolonifera*” should be: “*Agrostis stolonifera*”. | Corrected. |
| **Page 17, Line 299:** Instead of “which include:”should be: “which include”. | Corrected. |
| Page 17, Line 303: Instead of “as well as,”should be: “as well as”. | Corrected. |
| Page 17, Line 305: Instead of “as well as,”should be: “as well as”. | Corrected. |
| Page 17, Line 305: Instead of “in vivo”should be: “*in vivo*”. | Corrected. |
| **Page 17, Line 316:** “temporally” or “temporarily”? | Corrected.  |
| **Page 18, Line 326:** Instead of “β-oxidation”should be: “*β*-oxidation”. | Corrected. |
| **Page 18, Lines 325–327**: “Furofuran lignans: sesamin, aschantin, sesartemin and yangambin showed weak activity against *Staphylococcus aureus* and *Escherichia coli*. Sesamin and aschantin were inactive against *Escherichia coli* 201.” Sesamin and aschantin cannot be inactive against *Escherichia coli* and show weak activity against the *E. coli*. Please, clarify. | Authors have carefully read the paragraph and are very grateful for useful comments. We agree with the reviewer, the paragraph is unclear to a certain extent. In order to explain the paragraph was rewritten: Furofuran lignans: sesamin, aschantin, sesartemin and yangambin showed weak activity against *Staphylococcus aureus*. Sesartemin and yangambin also showed weak activity against *Escherichia coli*, while sesamin and aschantin were inactive. |
| **Page 18, Line 331:** Instead of “Fomitopsis Palustris” should be: “Fomitopsis palustris”. | Corrected. |
| **Page 18, Line 333:** Instead of “yangambin, were”should be: “yangambin were”. | Corrected. |
| **Page 18, Lines 339–347:** The data: “Ortet et al.57 evaluated in vitro cytotoxicity of eudesmin, magnolin, epimagnolin A, aschantin, kobusin andsesamin in a screening panel consisting of various mammalian tumor cell lines. All furofuran lignans were tested for their antimalarial activity against chloroquine-resistant Plasmodium falciparum and for their cytotoxicity against murine normal cells. While no promising cytotoxicity against human tumor cells were noticed, marginal potency and selectivity was found for compounds eudesmin, magnolin, epimagnolin A, aschantin, kobusin against murine colon 38. Magnolin, epimagnolin A, aschantin, kobusin and sesamin showed mild antiplasmodial activities, sesamin being the most active compound, without noticeable toxicity on mammalian normal cells.” Should be checked and re-written clearly and concisely. | Authors are very grateful for Your advice. The paragraph was carefully read and re-written:Ortet et al.57 evaluated *in vitro* cytotoxicity of eudesmin, magnolin, epimagnolin A, aschantin, kobusin and sesamin against various human and murine tumor and normal cells and antimalarial activity against chloroquine-resistant *Plasmodium falciparum*. Tested compounds showed no cytotoxic activity against human tumor cells. With the exception of the sesamin, all other lignans showed weak cytotoxic activity against murine normal cells. Epimagnolin A, aschantin, kobusin and sesamin showed mild antiplasmodial activities. Furthermore, the cytotoxicity of sesamin on mammalian normal cells was unnoticeable. |
| **Page 18, Line 339:** Instead of “in vitro”should be: “in vitro”. | Corrected. |
| **Page 19, Line 348:** Instead of “caruilignan D, syringaresinol, sesamin, diayangambin and sesartemin were tested using Meth-A” should be: “caruilignan D, sesamin and sesartemin were tested using Meth-A”. | Corrected. |
| **Page 19, Line 348:** Instead of “sesartemin, were” should be: “sesartemin were”. | Corrected. |
| **Page 19, Line 357:** Instead of “*A. canariensis, A. caruifolia, A. gorgonum, A. jacutica, A. macrocephala, A. minor, A. sieversiana,*” should be: “*A. canariensis, A. caruifolia, A. gorgonum, A. jacutica, A. macrocephala, A. minor, A. sieversiana,*”. | Corrected.  |
| **Page 19, Line 363:** Instead of “genus, could”should be: “genus could”. | Corrected. |
| **Page 19, Line 365:** Instead of “challenge, that”should be: “challenge that”. | Corrected. |
| **Page 20, Line 382:** Instead of “EC 2.1.1.104 – caffeoyl-CoA O-methyltransferase”should be: “EC 2.1.1.104 – caffeoyl-CoA *O* methyltransferase”. | Corrected. |
| **Page 20, Line 383:** Instead of “EC 2.1.1.68 – 5-hydroxyconiferaldehyde/5-hydroxyconiferyl alcohol O-methyltransferase”should be: “EC 2.1.1.68 – 5 hydroxyconiferaldehyde/5-hydroxyconiferyl alcohol *O*-methyltransferase”. | Corrected. |
| In the reference No. 13: Instead of “genra”should be: “genera”. | Corrected. |
| References 20, 26, 29, 31, 48, 61, 63, 111, 135, 160, 184 should be formatted to follow the Journal’s style. | Formatted. |
| In the reference No. 196: Instead of “Yamadat”should be: “Yamada”. | Corrected. |

Thanks again for the opportunity to improve the manuscript.

Sincerely,

on behalf of all authors,

*Gordana Stojanovic*