

Survey on the use of medicinal plants for the prevention and treatment of COVID-19

Dear respondents,

This questionnaire was developed by a research team and a student demonstrator in Pharmaceutical Botany at the Department of Biology, Medical University “Prof. Dr. Paraskev Stoyanov.”

Aim of the study :

The aim of this study is to conduct an ethnobotanical research of traditional knowledge and the use of medicinal plants for the prevention and treatment of COVID-19.

The results obtained will contribute to the development of an up-to-date database of medicinal plants with antiviral properties and will serve as a basis for future pharmacological and pharmacognostic studies aimed at the development of new pharmaceutical products for the treatment of COVID-19.

Study Data:

The study will assess the knowledge of a randomly selected sample of local residents from various settlements across the country regarding the use of medicinal plants for the prevention and treatment of COVID-19. Responses will be recorded automatically during questionnaire completion.

This survey is anonymous and confidential.

The information provided will be processed and used solely for the purposes of the scientific study, in accordance with the General Data Protection Regulation (GDPR, Regulation (EU) 2016/679), available at the following link: <https://www.cdpd.bg/?p=element&aid=991>

Prior to completing the questionnaire, participants are advised to review the data processing and personal data protection notice:

<https://docs.google.com/document/d/1iOR5Ol-VpyIGjzu9FvlPimuYCe7tDgro/edit?usp=drivesdk&ouid=116896966321535089110&rtpof=true&sd=true>

Completion of the present questionnaire may proceed only after obtaining informed consent from the participant.

If the participant does not wish to provide informed consent, please select the response “No” and then click “Submit form.”

What are my rights regarding access to the results?

The results obtained during the course of the study are confidential and will not be disclosed to third parties.

The results of this study will not be used for purposes other than those described above. The data will be stored electronically in Google Drive, which is additionally password-protected, as well as on a computer secured with restricted access.

The results may be published in scientific journals and presented at scientific forums only in aggregated form, ensuring that participants’ personal data remain strictly confidential.

Can I withdraw my consent?

You may withdraw from participation at any time during completion of the questionnaire by using the “Back” button, closing the browser window, or selecting the “Clear form” option located at the bottom right of the webpage.

In such cases, all responses provided up to the point of withdrawal will not be recorded or processed.

The questionnaire has no time limit and requires no more than 15 minutes to complete.

What are the benefits for participants?

The results of this study will be published and will contribute to improving public knowledge regarding the prevention and treatment of COVID-19.

Furthermore, the survey will allow for the documentation, preservation, and dissemination of participants’ personal knowledge, thereby contributing to the enrichment of ethnobotanical knowledge at the national level.

Are there any potential risks?

There are no foreseeable risks to participants due to the nature of the study.

Contact Information

For any questions, please contact:

Principal Investigator: Assist. Prof. Djeni Cherneva, PhD

Tel.: +359 52 677 28840

Email: djeni.cherneva@mu-varna.bg

Nadezhda Nikolova

Tel.: +359 880 977 09

Email: nikolova.nadezhda99@gmail.com

Alternative Contact Person: Svetla Slavova

Tel.: +359 52 677 050

Email: svetla.slavova@mu-varna.bg

1. I confirm that I have read and understood the participant information sheet.

Please select one answer:

- Yes
- No

2. I confirm that I have received, read, and understood the data protection notice for participants in scientific research (for participants in Bulgaria, access to the full text is provided via a link to the Personal Data Protection Notice developed by the Ethics Committee of the Medical University of Varna).

Please select one answer:

- Yes
- No

3. I understand that my participation is voluntary and that I may withdraw at any time without providing a reason and without any negative consequences or prejudice to my rights.

Please select one answer:

- Yes
- No

4. I consent to the researchers and regulatory authorities accessing my confidential information upon request.

Please select one answer:

- Yes
- No

5. I provide consent for the processing of my personal data for the purposes of this study.

Please select one answer:

- Yes
- No

6. I agree to participate in this study.

Please select one answer:

- Yes
- No

7. I am not a robot

Please select all that apply.



8. Gender:

Please select one answer:

- Male
- Female

9. Please select your age group:

Please select one answer:

- 18–30 years
- 31–40 years
- 41–50 years
- 51–65 years
- Over 65 years

10. What is your highest level of education?

Please select one answer:

- Primary education
- Secondary education
- Higher education
- Other

11. You are:

Please select one answer:

- Pupil
- Student
- Employed
- Retired

- Unemployed

12. Place of residence:

13. Have you had COVID-19?

Please select one answer:

- Yes → Proceed to Question 15
- No → Proceed to Question 14

14. If you answered “No,” please indicate whether you used medicinal plants for prophylactic purposes.

Please select one option.

- Yes, I used them.
- No, I did not use them.

Proceed to Question 37

15. If you answered “Yes,” please indicate the type of therapy you used during your illness.

Please select one answer.

- Treatment with physician-prescribed synthetic medicines only
- Combined therapy with medicinal plants and physician-prescribed synthetic medicines
- Treatment with physician-prescribed synthetic medicines supplemented with self-administered herbal therapy
- Self-medication with medicinal plants and phytopreparations
- Initial self-medication with medicinal plants followed by treatment with synthetic medicines
- Mild/asymptomatic infection without the use of medicinal treatment

16. Please indicate the reason for your choice of treatment.

Please select one answer.

- I fully trust the therapeutic properties of medicinal plants and therefore preferred herbal therapy
- I fully trust the therapeutic properties of medicinal plants and therefore used herbal therapy alongside conventional treatment for better prevention of potential complications

- I trust the therapeutic properties of medicinal plants, but did not achieve the desired effect, which led to subsequent treatment with synthetic medicines
- I do not trust herbal therapy
- I have no opinion and rely on the judgment of a medical specialist

The section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant. Completion of all sections is not mandatory.

Section 1:

If you have used physician-prescribed herbal therapy or combined treatment, please provide the following information for all prescribed medicinal plants and phytopreparations:

17. Name of the medicinal plant/phytopreparation
18. Form of administration – decoction, tincture, ointment, tablets, etc.
19. Method of administration – dosage, daily intake
20. Treatment outcome

Section 2:

If you have used physician-prescribed herbal therapy or combined treatment, please provide the following information for all prescribed medicinal plants and phytopreparations.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

21. Name of the medicinal plant/phytopreparation
22. Form of administration – decoction, tincture, ointment, tablets, etc.
23. Method of administration – dosage, daily intake
24. Treatment outcome

Section 3:

If you have used physician-prescribed herbal therapy or combined treatment, please provide the following information for all prescribed medicinal plants and phytopreparations.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

- 25. Name of the medicinal plant/phytopreparation
- 26. Form of administration – decoction, tincture, ointment, tablets, etc.
- 27. Method of administration – dosage, daily intake
- 28. Treatment outcome

Section 4:

If you have used physician-prescribed herbal therapy or combined treatment, please provide the following information for all prescribed medicinal plants and phytopreparations.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

- 29. Name of the medicinal plant/phytopreparation
- 30. Form of administration – decoction, tincture, ointment, tablets, etc.
- 31. Method of administration – dosage, daily intake
- 32. Treatment outcome

Section 5:

If you have used physician-prescribed herbal therapy or combined treatment, please provide the following information for all prescribed medicinal plants and phytopreparations.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

- 33. Name of the medicinal plant/phytopreparation
- 34. Form of administration – decoction, tincture, ointment, tablets, etc.
- 35. Method of administration – dosage, daily intake
- 36. Treatment outcome.

The section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant. Completion of all sections is not mandatory.

Section 1:

If you have self-medicated with medicinal plants, or initially self-medicated but subsequently required treatment with synthetic medicines, please complete the section for each medicinal plant used.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

37. Name of the medicinal plant. Please indicate all local names you are aware of

38. Mode of procurement– collection from the wild, purchase from markets, or from herbal pharmacies.

39. Plant part used – root, herb (aerial parts), leaf, flower, fruit, seed

40. Form of administration – fresh form, decoction, tincture, ointment, poultice, etc.

41. Method of administration – what dosage or quantity do you use?

42. Do you use it alone or in combination with other medicinal plants? If in combination, please specify which ones

43. What is the source of your knowledge regarding the medicinal properties of this plant? (e.g., elderly people acquaintances, internet, literature, media)

44. Please indicate the symptoms of COVID-19 for which the plant was used

45. Was it necessary to supplement the herbal treatment with synthetic medicines?

Please select one answer.

- Yes
- No

46. Outcome of the self-medication

Section 2:

If you have self-medicated with medicinal plants, or initially self-medicated but subsequently required treatment with synthetic medicines, please complete the section for each medicinal plant used.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

47. Name of the medicinal plant. Please indicate all local names you are aware of

48. Mode of procurement– collection from the wild, purchase from markets, or from herbal pharmacies.

49. Form of administration – fresh form, decoction, tincture, ointment, poultice, etc.

50. Method of administration – what dosage or quantity do you use?

51. Do you use it alone or in combination with other medicinal plants? If in combination, please specify which ones

52. What is the source of your knowledge regarding the medicinal properties of this plant? (e.g., elderly people acquaintances, internet, literature, media)

53. Please indicate the symptoms of COVID-19 for which the plant was used

54. Was it necessary to supplement the herbal treatment with synthetic medicines?

Please select one answer.

- Yes
- No

55. Outcome of the self-medication

Section 3:

If you have self-medicated with medicinal plants, or initially self-medicated but subsequently required treatment with synthetic medicines, please complete the section for each medicinal plant used.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

56. Name of the medicinal plant. Please indicate all local names you are aware of

57. Mode of procurement– collection from the wild, purchase from markets, or from herbal pharmacies.

58. Form of administration – fresh form, decoction, tincture, ointment, poultice, etc.

59. Method of administration – what dosage or quantity do you use?

60. Do you use it alone or in combination with other medicinal plants? If in combination, please specify which ones

61. What is the source of your knowledge regarding the medicinal properties of this plant? (e.g., elderly people

acquaintances, internet, literature, media)

62. Please indicate the symptoms of COVID-19 for which the plant was used

63. Was it necessary to supplement the herbal treatment with synthetic medicines?

Please select one option.

- Yes
- No

62. Outcome of the self-medication

Section 4:

If you have self-medicated with medicinal plants, or initially self-medicated but subsequently required treatment with synthetic medicines, please complete the section for each medicinal plant used.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

63. Name of the medicinal plant. Please indicate all local names you are aware of

64. Mode of procurement– collection from the wild, purchase from markets, or from herbal pharmacies.

65. Form of administration – fresh form, decoction, tincture, ointment, poultice, etc.

66. Method of administration – what dosage or quantity do you use?

67. Do you use it alone or in combination with other medicinal plants? If in combination, please specify which ones

68. What is the source of your knowledge regarding the medicinal properties of this plant? (e.g., elderly people, acquaintances, internet, literature, media)

69. Please indicate the symptoms of COVID-19 for which the plant was used

70. Was it necessary to supplement the herbal treatment with synthetic medicines?

Please select one option.

- Yes
- No

71. Outcome of the self-medication

Section 5:

If you have self-medicated with medicinal plants, or initially self-medicated but subsequently required treatment with synthetic medicines, please complete the section for each medicinal plant used.

This section is duplicated multiple times for your convenience. Each section should be completed for one medicinal plant.

72. Name of the medicinal plant. Please indicate all local names you are aware of

73. Mode of procurement– collection from the wild, purchase from markets, or from herbal pharmacies.

74. Form of administration – fresh form, decoction, tincture, ointment, poultice, etc.

75. Method of administration – what dosage or quantity do you use?

76. Do you use it alone or in combination with other medicinal plants? If in combination, please specify which ones

77. What is the source of your knowledge regarding the medicinal properties of this plant? (e.g., elderly people, acquaintances, internet, literature, media)

78. Please indicate the symptoms of COVID-19 for which the plant was used

79. Was it necessary to supplement the herbal treatment with synthetic medicines?

Please select one option.

- Yes
- No

80. Outcome of the self-medication

