Applicant: Forrest, Alan

Organisation: Royal Botanic Garden Edinburgh

Funding Sought: £19,700.00 Funding Awarded: £19,700.00

# **DIR26FW\1019**

#### **DARFW052 Kobil Bobokalonov**

The proposed fellow, Kobil Bobokalonov, will extend his skills in conservation science, data acquisition and management, systematics, and presentation and bring these expanded skills to bear on case studies of plants native and endemic to Tajikistan supporting CBD and GSPC National targets.

# **Section 1 - Contact Details**

#### PRIMARY APPLICANT DETAILS

TitleDrNameAlanSurnameForrest

Tel (Work) Email (Work) Address

#### **GMS ORGANISATION**

Туре	Organisation
Name	Royal Botanic Garden Edinburgh
Phone	
Email	
Address	

# **Section 2 - Title, Dates & Budget Summary**

### Q3. Name and official address of proposed Darwin Fellow

(include email address). Please include a one page CV with the package of CVs for Q7.

Name	Kobil Bobokalonov
Address	
Email Address	

## Q4. Summary of proposed Fellowship i.e. Outcome

The proposed fellow, Kobil Bobokalonov, will extend his skills in conservation science, data acquisition and management, systematics, and presentation and bring these expanded skills to bear on case studies of plants native and endemic to Tajikistan supporting CBD and GSPC National targets.

## **Q5. Project dates**

**Start date:** 

01 July 2020

**End date:** 

30 September 2021

Duration (e.g. 1 year, 2 months):

1 Year, 3 months

#### **Q6. Budget summary**

	2020/2021	2021/2022	Total
(Apr - Mar) £			19,700.00

# **Section 3 - Principals**

#### **Q7. Principals in the Project**

Please give the details of the individuals from the Lead Organisation (and other institutions if relevant) who would be directly involved in supervising/working with the Darwin Fellow. Please provide a one page CV for each of these named individuals and remember to include the Fellow's CV in the pdf. You may copy and paste this table if you need to provide details of more individuals.

Details	Project Leader	Other Expert	Other Expert	Other Expert
Surname	Forrest	Stott	No Response	No Response
Forenames(s)	Alan	Gail	No Response	No Response
Post held	Biodiversity Scientist	Researcher	No Response	No Response
Organisation	Royal Botanic Garden Edinburgh	Royal Botanic Garden Edinburgh	No Response	No Response
Telephone/Skype			No Response	No Response
Email				No Response

#### Do you require more fields?

No

Please provide a one page CV for each of these named individuals, including the Fellow named at Q3, uploaded as one PDF.

- 前 05/11/2019
- © 11:25:03
- pdf 954.16 KB

## **Section 4 - Aims, Activities & Achivements**

# Q8. Describe briefly the aims, activities and achievements of the Lead Organisation

#### (Large organisations please note this should describe your unit or department)

The Royal Botanic Garden Edinburgh and its Centre for Middle Eastern Plants (CMEP) have a long standing interest in the flora and vegetation of the Middle East and SW Asia, including parts of Central Asia. Institutional experience in the region and expertise in botany, education, horticulture and conservation makes the RBGE uniquely positioned to deliver effective capacity development of young botanists and conservationists regionally.

RBGE has led 17 main Darwin Initiative projects (regionally including Iraq, Yemen, Afghanistan, Tajikistan) and ten Darwin Fellowships.

CMEP has project management and research experience across Middle East and SW Asia and has recently received funds from sources including The British Council, Leverhulme Trust and UN Environment. It currently manages a Darwin Initiative project in Tajikistan to reduce unsustainable wild harvesting through local horticulture interventions, and works extensively with Kulob Botanic Garden to increase capacity, awareness and interpretation about the sustainable use of native plants.

# Q9. Describe briefly the aims, activities and achievements of the proposed Darwin Fellow's employing organisation.

#### (Large organisations please note this should describe your unit or department)

The Institute of Botany, Plant Physiology and Genetics of the Academy of Sciences of the Republic of Tajikistan was officially founded in 2011, based upon the Academy of Sciences preceding during Soviet times

The Institute is dedicated to the study of the plants and vegetation of the territory of Tajikistan. A focus on useful plants, in agriculture and medicine, and the study of growth characteristics has been made. The National Herbarium in Dushanbe contains more than 200,000 specimens of vascular plants, the largest collection of plants from Tajikistan globally. Herbarium staff actively curate and identify specimens, and a database system has been started. However, most information in the herbarium is not digital and cannot be used for analyses for conservation. The majority of staff do not hold PhD and many studies focus on Tajikistan but do not consider wider Central Asia or global context. Funds are limited.

# Q10. Describe briefly the proposed Fellow's current role within their organisation and their link to a Darwin project (if applicable), including the project reference number, his/her role in that project and any ongoing involvement.

# If the Fellow has no link to a Darwin project please discuss their involvement in implementing the biodiversity conventions, treaties and agreements supported by the Darwin Initiative.

The proposed fellow, Kobil Bobokalonov, has worked at the National Herbarium in Dushanbe since 2012. He is currently a candidate PhD student, working alongside Central Siberian Botanic Garden which is a common place for Tajik botanists to register for study. His role at the herbarium focuses on the collection, identification and curation of botanical specimens from Tajikistan, and also input of data into database in order to better manage and access collections and the information they contain.

Mr Bobokalonov has worked alongside Dr Mariyo Boboev, Director of Kulob Botanic Garden, for several

years. Darwin Project 26-010 seeks to improve the status of plant species currently unsustainably harvested, and the use of herbarium specimens and the data they contain to identify Important Plant Areas and undertake conservation status assessments will require collaboration with Mr Bobokalonov and the National Herbarium. He will also be involved in field monitoring of threatened populations, and the Red Listing of both Darwin Project target species and endemic species in the genus Ziziphora which is also unsustainably harvested and is the subject of his PhD studies.

#### Please provide a combined PDF of all Letters of Support.

- & DIR26FW1019 Support Letters
- **i** 05/11/2019
- ① 11:25:37
- pdf 1.3 MB

## **Section 5 - Outcomes & Objectives**

#### Q11. Provide a concept note for the Darwin Fellowship. This should include:

# Q11a. A clear outline of the aim and objectives of the Fellowship, and an indication of how the achievement will be measured

The primary aim of this proposal is to increase relevant skills for conservation and sustainable use of plant resources in Tajikistan, through targeting a young and highly talented and regarded botanist. The objectives are to:

Increase knowledge about fundamental conservation principles and practice with regard to the plants and habitats of Tajikistan. This will be measured through the production of a tailored presentation to be shown at a congress in Tajikistan in September 2021 hosted by Kulob Botanic Gardens.

Increase knowledge and implementation of the use of herbarium resources to contribute to conservation and sustainable use of plant resources. This will be evidenced through a short report and work plan to increase use of the National Herbarium in Dushanbe in this way, through a series of case studies that will feed directly into and add value to the fellow's PhD studies as well as Darwin Initiative project 26-010. Increase knowledge about how Tajik biodiversity can be recognised in a global context, through expanding studies on Tajik species of Ziziphora to be included in a global phylogeny and taxonomic treatment and concentrating on Tajik diversity spatially in a regional and global context. This will be evidenced through a formal scientific publication and a presentation during September 2021.

Increase skills in IUCN Red Listing, to include data acquisition and analyses, and to train others in Red Listing in order to better understand and present the conservation status of Tajik plant diversity. This will use Ziziphora species and taxa included in Darwin Initiative project 26-010 as case studies, and the training will take place at a special workshop in Kulob in September 2021. Targeted presentations will be constructed.

#### Q11b. The role of the Lead Organisation, and others where relevant

The primary role of the host institution will be to provide a secure and welcoming working environment for the proposed fellow, with all technical facilities available. This will include use of all ICT, library, laboratory and herbarium facilities, as well as dedicated office space and access to all facilities. The fellow will be treated as a member of staff.

The specific roles of the host institute will involve:

Arranging English language training to improve the ability of the fellow to present his work to international audiences:

Training in the management and use of herbarium data for conservation purposes, to include geo-referencing techniques;

Basic molecular techniques to include DNA extraction and sequencing, processing and analyses leading to phylogenetic patterns and dating analyses;

Training in the value, concept and practice of IUCN Red Listing, and in preparing workshop materials for focused Red Listing targets;

Basic spatial analyses leading to a greater understanding of IPA, KBA and Red List outputs;

The host institute will also support the fellow while he is working in Tajikistan, including involving him in all planning for Darwin Initiative related activities related to the National Report on Native Plants for Livelihoods.

# **Section 6 - Legacy & Collaboration**

#### Q12. Legacy

Provide information on how the Darwin Fellow will utilise, promote and disseminate the benefits of the Fellowship on return to his/her home country. Will a strategy be developed during the Fellowship to ensure this is achieved?

The proposed fellow will publish an article on the systematics of Ziziphora, placing Tajik species in a global context, and present this work and the concepts behind it at at least one congress regionally.

He will learn the theory, value and practice of IUCN Red Listing, and will assist in running a workshop on Red Listing over-harvested plants in Tajikistan in Kulob in September 2021.

He will also participate in and facilitate workshops to acquire information on plant species that are used and collected by local communities in Tajikistan, and feed this information into the National Report on Native Plants for Livelihoods that is a key output of Darwin project 26-010. This will be done in collaboration with staff at both RBGE and Kulob Botanic Garden.

The fellow will write a report detailing how the herbarium collections in Dushanbe can be better used to achieve conservation and sustainable use outcomes, and form a plan for implementation. This will include using systematic and location data to undertake analyses to identify Important Plant Areas and Key Biodiversity Areas in Tajikistan, using specific case studies.

Q13. How will the Fellowship assist the Fellow's organisation and/or local communities and/or home country in working towards the objectives (or implementation) of the Conventions, Treaties and Agreements supported by the Darwin Initiative?

#### Please refer to specific Articles or cross cutting themes as appropriate.

Currently, the herbarium collection in Dushanbe - which holds the most Tajik collections globally - is seen and used as a taxonomic and systematic resource. Accessing information held in Dushanbe herbarium to enable conservation assessment, conservation planning and prioritization will greatly add value to the collections and increase the skills of key staff there. There will, in the future, be direct impacts on the conservation and sustainable use of endemic species, and will help Tajikistan implement CBD and GSPC targets.

Specifically, the fellow will take a lead role in workshops to be hosted in Kulob, Tajikistan in 2021 as part of Darwin Initiative 26-010, which will involve data gathering for sustainable use and research into the

conservation of used plants, and also Red Listing to increase capacity in Tajikistan to re-assess endemic and rare plant species.

The fellow's research on Ziziphora will be placed in a wider regional and global context, by considering species occurring outside Tajikistan and considering spatial analyses that place Tajik endemic plants in that wider context. This global view will change attitudes to restricted research boundaries and encourage further global collaboration in botanical research and conservation.

# Q14. What collaboration has there been with the Darwin Fellow to date in developing the proposal, and what collaboration is planned for the duration of the Fellowship?

# Where relevant, describe any consultation or collaboration by the proposed Fellow within his/her own country.

The proposed fellow has accompanied RBGE staff on several field expeditions in Tajikistan, and has shown excellent field skills in both taxon specific and general field botany. He is a committed conservation botanist, young, and with excellent developing skills.

He has shown a desire to travel to other countries to gain experience to take back to Tajikistan, and it was he who first approached RBGE about finding a mechanism to allow him to visit RBGE and gain further skills and experience.

The proposed fellow has worked alongside staff at Kulob Botanic Garden, partners on Darwin Project 26-010, for many years, and is highly regarded by Director Dr Mariyo Bobev and Ganji Tabiat CEO Jovidon Boboev. He is seen in Tajikistan as a future leader in conservation and taxonomic research.

The proposed fellow outlined several areas of work that he wished to learn and improve during any proposed fellowship. Some of these are specifically designed to increase his understanding and effectiveness in his host institute, and others are designed to progress his personal research skills and knowledge and to place his work in Tajikistan into a wider regional and global context. They will complement his PhD studies and add to them.

#### Q15. Where will the Darwin Fellow be based?

#### Please be specific with organisational details and dates (where more than one location).

The fellow will be based for the first 2 months in Edinburgh, attending English courses, learning herbarium, molecular and conservation statistic techniques. He will plan his future work schedule in more detail, specifically on the outputs.

He will return to Tajikistan (where he has a young family) to undertake data acquisition pertaining to conservation assessments and prioritization; collect field and herbarium samples for molecular analyses; The fellow will return to Edinburgh for 2 months to complete molecular and analytical work, and prepare article for publication. He will prepare workshop materials for Red Listing training, and complete Red List assessments. He will assist in preparation for delivery of workshops with Tajik and regional partners to gather information on plant uses, to feed into the National Report on Native Plants for Livelihoods, that will be conducted at a congress in Kulob in September 2021.

Final preparation for the congress will occur in Tajikistan until the end of the fellowship.

While in Tajikistan, the fellow will be based at the National Herbarium in Dushanbe, with occasional visits to Kulob Botanic Garden to integrate with expert staff there.

## **Section 7 - Programme of Work & Funding**

### Q16. Provide a programme of work, including key milestones, through the

#### duration of the Fellowship

Please complete the Excel spreadsheet linked below to describe the intended workplan for your project.

Fellowship Implementation Timetable Template

For each activity (add/remove rows as appropriate) indicate the number of months it will last, and shade only the months in which an activity will be carried out. The workplan can span multiple pages if necessary.

- & <u>DIR26FW1019 Implementation\_Timetable\_FINA</u>
  - L
- 05/11/2019
- © 15:43:39

#### Q17. Costs

Using UK Government Financial Years (April 2020 - March 2021), please complete your budget using the template provided here and upload below.

Fellowship Budget Template

Please note, this should not be presented as academic years.

- 前 05/11/2019
- O 15:24:46
- 🕅 xls 72.5 KB

## Q18. Other Sources of funding: provide details and amounts

Date applied for	Donor Organisation	Amount (include currency)	Comments (including confirmed/unconfirmed)
No Response	Royal Botanic Garden Edinburgh		In kind salaries and overheads
No Response	No Response	No Response	No Response
No Response	No Response	No Response	No Response
No Response	No Response	No Response	No Response

#### Q19. FCO Notification

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise details of the Darwin Fellowship and the resultant work in the UK or the Darwin Fellow's home country.

Unchecked

Please comment on whether you require a visa to undertake this Fellowship. If you require a visa, do you foresee any difficulty in being granted a visa?

A visa is required for the proposed fellow.

During October 2019, two colleagues from Tajikistan that are partners on Darwin Initiative 26-010 visited the UK and had no difficulty in acquiring a UK visa. We therefore do not expect any difficulties in this regard. Support letters from RBGE, the Tajik host institute and other Tajik character references will be supplied to facilitate the visa application process.

#### **Section 8 - Certification**

#### **Q20. Certification**

#### On behalf of the

Trustees

of

Royal Botanic Garden Edinburgh

#### I apply for a grant of

£19,700.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

• I enclose one page CVs for project principals and letters of support as requested in the Guidance.

Checked

Name	Alan Forrest
Position in Organisation	Biodiversity Scientist
Signed	<ul> <li>♣ AF Signature</li> <li>★ 04/11/2019</li> <li>♠ 21:34:59</li> <li>♠ jpg 207.52 KB</li> </ul>

# **Section 9 - Submission Checklist**

I have read the Guidance.	Checked
I have read, and can meet, the current Terms and Conditions for this fund.	Checked
I have provided actual start and end dates for the Fellowship.	Checked
I have provided my budget based on UK government financial years i.e. 1 April – 31 March.	Checked
I have checked that my budget is complete, correctly adds up and that I have included the correct final total in the application.	Checked
The application been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
I have included a 1 page CV for the proposed Fellow and the experts listed in Question 7.	Checked
I have provided the relevant letters of support.	Checked
I have checked the Darwin website immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on GOV.UK.	Checked

#### We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

Checked

#### Data protection and use of personal data