# Bio-data

Name: Dr. K. B. Chandra Shekar

Designation: Scientist – D

Total length of service: 30 years

Place of working: Central Sericultural Research & Training Institute, Mysore,

Karnataka.

# Work experience:

**1.** Silkworm Seed Production Centre Berhampore (W.B.) 3.3 years 27/11/1990 to 23/2/1994

Production and supply of silkworm eggs.

**2.** P3 Multivoltine farm Nagenahalli and P1 Grainage Chikkamalavadi Karnataka 6.3 yrs 11/3/1994 to 08/6/2000

Maintenance of Multivoltine stocks and production of P2 and P1 Dfls.

**3.** P4 Basic Seed Farm, CSR&TI, Central Silk Board, Hassan 16 years 9/6/2000 to 30/05/2016

Bivoltine Basic Stock Maintenance and multiplication

**4.** Central Sericultural Research & Training Institute, Mysore 5 years June 2016 to till date

Research projects on

CI – 5 Projects

Co-PI – 03 Projects

- a) Improvement of Pure Mysore.
- b) Developments of New Multivoltine Hybrids.
- c) Maintenance of multivoltine germplasm.

Publication - 18

Popular articles – 03

Seminars (National) – 09

International workshops attended – 03

Attended 25<sup>th</sup> International Science Congress conference at Tsukuba, Japan from 19<sup>th</sup> November to 22<sup>nd</sup> November 2019 presented a paper on "Improvement of Pure Mysore race for productivity and silk quality by directional selection.

#### **Thesis:**

Submitted the Ph.D degree thesis to Mysore University entitled "Studies on the impact of different methods of selection for maintenance of original breed characteristics of bivoltine silkworm, *Bombyx mori* L the thesis was accepted by the University of Mysore, Mysore. The degree was awarded at the convocation on 07-04-2012.

#### SIGNIFICANT CONTRIBUTION:

Maintenance and multiplication of the silkworm breeds plays a very vital role in the silk industry. At a very stage of multiplication the racial characters to be protected by applying systematic selection procedures. All the productive and robust breeds were maintained true to the breed characteristic and were at par with the breeders stock over a period of 16 years. A strict check on the Pebrine disease is also taken care. The disease free laying supplied to the downstream multiplication centers has also performed to the desired bench mark level.

By adapting trenching and mulching method in mulberry cultivation, it is established that the soil health status improves, quality mulberry leaf is harvested, quality seed cocoons and quality seeds are produced. The farm waste was effectively recycled in the trenches, converted to compost, vermi compost. All these cumulatively find a solution to the expensive and non availability of compost manure of cow dung origin. P4 Basic Seed Farm, Hassan is on this track since 2008 and no compost manure has been purchased from external source. The farm is a model, lot of farmers and officials visited to the centre for the on hand information on trenching and mulching adaption in mulberry garden maintenance.

Attended 23<sup>rd</sup> International Science Congress conference at Bangalore the oral presentation was on the paper entitled "Impact of trenching and mulching on soil fertility, nutritional status of mulberry leaves and parental seed crop rearing at P4 level"

### **Publication seminars conference details**

1. Chandra Shekar K.B., Basavaraja H.K. Changes in qualitative quantitative characters in bivoltine silkworm breeds of *bombyx mori* L. under different selection methods In journal of sericulture 2008 Vol. 47 no 2175-182.

- 2. Mal Reddy N., Kishor Kumar C.M. Chandra Shekar K.B., Joge P.G, Nirmal Kumar S. and Kamble C.K. Sex specific difference in bivoltine silkworm, *Bombyx mori* L. with reference to cocoon characters, journal of sericulture 2008 Vol. 47 no 2230-233.
- **3.** Mal Reddy N., Kishor Kumar C.M. **Chandra Shekar K.B.**, Nirmal Kumar S. and Kamble C.K. Maintenance of authorized bivoltine silkworm breeds of *Bombyx mori* L. during multiplication cycle. Breeders Meet 2008 CSRTI Mysore pp 77-80.
- **4.** Kalpana G.V., **Chandrashekar K.B.**, Qadri S.M.H., Krishna Prasad, Shiva Nagendra Babu and Srinivasa Shetty. Studies on the role of seed farmers of Hassan district in the production of quality cocoons for commercial egg production. Golden jubilee national conference on Sericulture innovations: Before and beyond held at Central Sericultural Research and Training Institute, Srirampura, Mysore on 28-29 January, 2011. pp 120.
- 5. Chandrashekar K.B., Kalpana G.V., Nirmal Kumar S., Mal Reddy N., Kishor Kumar C.M. and Nayak. Maintenance of bivoltine breeds of Silkworm *Bombyx mori* L. and crop stability at P4 and P3 centers, Golden jubilee national conference on Sericulture innovations: Before and beyond held at Central Sericultural Research and Training Institute, Srirampura, Mysore on 28-29 January, 2011. pp 72.
- **6. Chandra Shekar K.B.**, Basaraja H.K. (2011) Hybrid vigour in bivoltine silkworm, *Bombyx mori* under different selection methods Journal of sericulture 2011, Vol. **50** (1), pp 64 -69.
- 7. Chandrashekar K.B., Kalpana G.V., Nirmal Kumar S. and Qadri S.M.H, 2012.Studies on the sustainability in the egg recovery in the popular bivoltine silkworm breed CSR2 at P4 maintenance centre. Abstract published in the National workshop on Promotion of Sericulture for sustainable income held at Chidambaram on 17-18<sup>th</sup> March, 2012, pp.80-81.
- **8. Chandrashekar K.B.** and Basavaraja H.K. 2012. Studies on the effect of directional selection on cocoon shell percentage in the bivoltine breeds CSR2 and CSR4. Abstract published in the National workshop on Promotion of Sericulture for sustainable income held at Chidambaram on 17-18<sup>th</sup> March, 2012. Pp.78-79.

- 9. Kalpana G.V., Chandrashekar K.B., Nirmal Kumar S. and Qadri S.M.H, 2012. Role of labour saving and non hazardous disinfection technique on the silkworm seed crop rearing by the progressive farmer A Case Study, Published in the Seminar entitled Inclusive and sustainable growth, Role of industries Government and Society, at BAIF Development 2013.
- 10. Kalpana G.V., Chandrashekar K.B., Nirmal Kumar S. and Qadri S.M.H, 2012. Adoption of Innovative technologies for labour saving in silkworm seed crop rearing by the progressive farmer A case study accepted for presentation in the Tenth Biennial Conference on Entrepreneurship held during February 20-22, 2013.
- 11. Chandra Shekar K.B., Kalpana G.V. Vedavyasa and Bindroo B.B., 2013 Importance of trenching and mulching method in mulberry garden maintenance and its impact on leaf quality and cocoon productivity at National Conference on Recent Advances in Modern Biology & Sericulture for Women Empowerment and Rural Development held on 24-26<sup>th</sup> October 2013 at Karnataka State Sericulture Research & Development institute, Thataghattapura, Biospectra: Vol. (2), September 2013 pp 237-243.
- 12. Chandra Shekar K.B., Basavaraja H.K.\* and Bindroo B.B., Studies on the effect of stabilizing selection on quantitative traits in the productive bivoltine breed CSR2 at National Conference on Recent Advances in Modern Biology & Sericulture for Women Empowerment and Rural Development held on 24~26<sup>th</sup> October 2013 at Karnataka State Sericulture Research & Development institute, Thataghattapura, Vol. (2), September 2013 pp 61-66.
- 13. Kalpana G.V., Chandra Shekar K.B. and Bindroo B.B. 2013 Impact of systemic bivoltine silkworm breed maintenance on the consistency in the expression of breed characters over generations at P4 level at National Conference on Recent Advances in Modern Biology & Sericulture for Women Empowerment and Rural Development held on 24-26<sup>th</sup> October 2013 at Karnataka State Sericulture Research & Development Institute, Thataghattapura, Vol. (2), September 2013 pp 67-72.
- **14. Chandra Shekar K.B.,** Kalpana G.V., Munirathnam Reddy\*, Vedavyasa and Bindroo B.B. 2014 Role of trenching and mulching method on soil fertility and its impact on mulberry leaf quality and cocoon productivity at the National Conference on Sericulture

- for Livelihood Security to be held from 29<sup>th</sup> to 31<sup>st</sup> January 2014 College of Sericulture Chintamani. Paper accepted for oral presentation. Pp-10.
- **15. Chandra Shekar K.B.**, Kalpana G.V., Munirathnam Reddy\* Sibayan Sen\* and Shiva Prasad V. Impact of trenching and mulching on soil fertility, nutritional status of mulberry leaves and parental seed crop rearing at P4 level. 23<sup>rd</sup> ISC conference at Bangalore.
- **16. Chandra Shekar K.B.,** Kalpana G.V. Munirathnam Reddy\* Sibayan Sen\* and Siva Prasad V., Effect of trenching and mulching on soil fertility, leaf quality, seed crop rearing and raw silk quality 24<sup>th</sup> ISC conference at Bangkok.
- 17. Chandrashekar K. B., Soudaminy P. V, Kusuma L., Satish L., Sivaprasad V. A correlative study between leaf consumption, growth, protein expression and silk output in few evolved and pure multivoltine silkworm breeds oral presentation at National Conference on Seri-Biomics: Challenges, Innovations and solutions to be held from 15-17 February 2018.
- **18.** Sivaprasad V., **Chandrshekhar K.B.**, S.B. Kulkarni., Soudaminy P.V., Dayananda, Morrison N. and Shankara Field performance of improved crossbreed, MV1 × S8 (Cauvery Gold) for cocoon productivity and silk quality poster presentation at the 6<sup>th</sup> Asia Pacific Congress of Sericulture and Insect Biotechnology APSERI-2019 held from 02-04 March 2019 pp100.
- **19. Chandrshekhar** K.B., Sivaprasad V., Kulkarni S.B., Soudaminy P.V., Chandrashekar .M.N, Dayananda and Pankaj Tiwary Improvement of Pure Mysore race for productivity and silk quality by directional selection poster presentation at 25<sup>th</sup> ISC Congress held at Tsukuba, Japan from 19<sup>th</sup> November to 22<sup>nd</sup> November-2019, pp 66.

## **Popular articles -3**

**a.** Kishor Kumar, C.M. **Chandra Shekar K.B.**, and K.N. Putte Gowda **CSR breeds- a revolution** in the bivoltine sector CSR thaligalu –bivoltine reshme shetradalli ondu hosa ayama article published in the Kale naada reshme magazine brought out by zilla Panchayat Department of sericulture Hassan pp10.

- **b.** Innovations of Sri. Rajashekar of Kanathur village, Hassan district on bio digester, bed cleaning rods and micro jet disinfection, article published in the workshop on innovative sericulture farmers.
- **c.** Innovations of Sri Manje Gowda of Baladare Village, Hassan district on Deflossing of netrikes and shoot transportation trolley, pullies for window, the article published in workshop on innovative sericulture farmers.

### Seminars National and International workshops attended:

- 1. Attended "Interactive meet on silkworm race maintenance" at CSRTI, Mysore. On 22-1-2011. Power point presentation on mulberry garden maintenance with trenching and mulching methods, training the plants and recycling of farm waste was presented to the farm in chargers/officers of DOS of Karnataka, Tamil Nadu & Andhra Pradesh. Stressed the need of nutritive leaf in basic seed farm especially for maintenance of basic stocks, crop performance its stability and expression of breed characters.
- 2. Attended national workshop on sericulture Innovations: before and beyond at CSR&TI on 28<sup>th</sup> 29<sup>th</sup> January, 2011. The paper entitled maintenance of bivoltine breeds of silkworm *bombyx mori* L. and crop stability at P4 and P4 centers was selected for the poster session.
- 3. Attended "Workshop on Innovative Sericulture Farmers" at CSR&TI Mysore on 16-12-2011. The two farmers namely of Hassan district were identified in association with DOS Hassan for their innovations. Sri Raja Shekar, for micro jet disinfection and biodigester. Sri. Maje Gowda for using power machine for deflossing of chandrike and specially designed trolley for transportation of leaf and rearing waste. Both the progressive farmers were selected for second price for their innovation.
- **4.** Attended the Krishi Mela at Raichur on 05-01-2012 along with the Awardee. Both the progressive farmers of Hassan district namely Sri. Raja Shekar & Sri Maje Gowda received the cash award for their innovations, second prize.
- 5. Attended the National workshop on Promotion of Sericulture for sustainable income held at Chidambaram on 17~18<sup>th</sup> March, 2012, presented the paper on the sustainability in the egg recovery in the popular bivoltine silkworm breed CSR2 at P4 maintenance centre.

- 6. Attended National Conference on Sericulture for Livelihood Security to be held from 29<sup>th</sup> to 31<sup>st</sup> January 2014 college of Sericulture Chintamani. Paper accepted for oral presentation, entitled Role of trenching and mulching method on soil fertility and its impact on mulberry leaf quality and cocoon productivity.
- 7. Attended the National Conference on Seri-Biomics: Challenges, Innovations and solutions held from 15-17 February 2018, at department of studies in Sericulture Science, Manasagangotri Mysuru. Oral presentation was made on the research paper entiled "A correlative study between leaf consumption, growth, protein expression and silk output in few evolved and pure multivoltine silkworm breeds".
- **8.** Attended the Krishi Mela at Hassan on 06-03-2018 was honored has actively participating in the training programmes from 2006 to 2016 organized by the Sericulture Training Centre, Hassan, for the benefit and improvement of the Sericulturist. Participated in 52 programmes and around 5000 Sericulturist has been benefited.
- **9.** Attended the 6<sup>th</sup> Asia Pacific Congress of Sericulture and Insect Biotechnology APSERI-2019 held from 02-04 March 2019 at Mysore A poster presentation was made on the paper entitled 'Field performance of improved crossbreed, MV1 × S8 (Cauvery Gold) for cocoon productivity and silk quality".
- 10. Attended the 25<sup>th</sup> International Science Congress conference at Tsukuba, Japan from 19<sup>th</sup> November to 22<sup>nd</sup> November a poster presentation was made on paper entitled "Improvement of Pure Mysore race for productivity and silk quality by directional selection".