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| **Submodule** | **Class** | **Methods** | **Descriptions** |
| breed.arch | BreedingGraph | self.graph | Access to the underlying graph structure |
| breed.arch | BreedingNode |  |  |
| breed.arch | BreedingProgram (Breeding Node) | self.gen  self.pop  self.bval  self.tbval  self.qpop  self.kpop  self.gmod  self.tgmod  self.pselop  self.mateop  self.sselop  self.gmfop  pselect()  mate()  evaluate()  calibrate()  sselect()  evolve() | Generation number of the breeding program  Main breeding population (gvmat)  Breeding values for main population  True breeding values for main population  Queue breeding populations (list)  Keyword (special) populations (dict)  Genomic model (gmod)  True genomic model (gmod)  Parental selection operator  Mating operator  Survivor selection operator  Genomic model factory operator  Parental selection  Parental mating  Performance evaluation  Calibrate genomic model  Survivor selection  Evolve the breeding program |
| breed.arch | GermplasmBank |  |  |
| breed.arch | BreedingEdge |  |  |
| breed.arch | MigrationOperator (BreedingEdge) | migrate() | Migrate part of a population |
| breed.arch | ImmigrationOperator (MigrationOperator) | immigrate() | Immigrate individuals |
| breed.arch | EmigrationOperator (MigrationOperator) | emigrate() | Emigrate individuals |
| breed.eval | PerformanceTrial |  |  |
| breed.eval | EvaluationOperator | evaluate() | Evaluate individuals |
| breed.mate | MateOperator | mate() | Mate individuals |
| model.gmod | GenomicModelCalibrationOperator | calibrate() | Calibrate genomic model |
| model.gmod | LinearGenomicModelCalibrationOperator |  |  |
| model.gmod | NonlinearGenomicModelCalibrationOperator |  |  |
| breed.sel | SelectionOperator | select() | Select individuals |