

# Index

## A

- Above ground biomass (AGB), 3, 45, 124, 128, 129, 162, 164, 165, 167, 168, 170, 236
- Abrus*, 104, 136, 165, 167, 175, 181, 183, 188, 189, 214, 225, 226
- Actinidia, 68, 75, 104, 114
- Afro-montane forest, 86, 87
- Alien species, 212, 242
- Animal diet, 162
- Apocynaceae, 20, 22–24, 30, 62–65, 68–72, 76, 77, 83, 103, 105, 106, 108–110, 112, 128, 134, 136–141, 143, 167–169, 186, 215, 216, 225, 231, 232
- Asian bittersweet, 8
- Asparagus, 73, 75, 104, 114, 116, 137, 167, 213, 226
- Atlantic forest, 18–27, 29, 30, 32, 34, 36, 38

## B

- Barro Colorado Island (BCI), 151, 154
- Bauhinia*, 33, 65, 75, 104, 105, 114–117, 137
- Bignoniaceae, 22, 23, 26, 31, 64, 65, 78, 217, 234
- Bioactive molecules, 183, 184, 186, 188, 196, 201
- Biodiversity, 3, 20–22, 29, 46, 93–94, 100, 123–145, 162–165, 167, 168, 170, 176, 237, 239–241, 243, 256
- Biological activity, 182, 183, 201
- Biological control, 217, 227–230, 236, 239, 242

- Biotechnological tool, 3
- Broken stick model, 115, 119

## C

- Calamus*, 65, 69, 75, 105, 114, 116, 117, 137, 138
- Cameroon, 86, 91
- Capparis*, 105, 138, 168, 175
- Carbon
  - accumulation, 49, 51, 153
  - cycling, 3, 44–48, 52, 153, 157
  - dynamics, 49, 152–153
  - storage, 3, 28, 43–52, 150
- Carbon sink, 45, 48, 52
- Carbon stock, 3, 44, 46, 47, 49, 50, 52, 176
- Cell culture, 188, 189, 191–197
- Chaco forest, 18–20, 22–26
- Chemical control, 228, 232, 233, 239, 241
- Chronosequence, 51
- Climate change, 3, 124, 212, 227, 256, 262–263, 266, 268
- Climbing mechanism, 1, 2, 11, 23, 30, 32, 34, 36, 38, 84, 85, 99, 102, 104–110, 112, 119, 125, 128, 130–132, 135, 136, 180
- Climbing plants, 18, 57–78, 82, 126, 151
- CO<sub>2</sub> Concentration, 10, 45, 48, 124, 262, 263
- Coleoptera, 176
- Combretum*, 101, 106, 116, 128, 139, 163–165, 169, 175, 184
- Community composition, 2, 11, 28, 46, 153–154, 260, 263, 265, 267, 268
- Competitive effects, 152–154

Conservation, 3, 28–38, 101, 119, 162, 177, 179–202, 235, 236, 259  
 Conservation status, 117–118, 120  
 Control measures, 212, 214–230, 234, 240–242  
 Convolvulaceae, 63–65, 69–74, 76, 77, 83, 104, 107–110, 137, 140, 141, 143, 169, 170, 218–220, 225, 231  
 Coromandel Coast, 126, 127, 129, 161–177

**D**  
 Deforestation, 3, 256, 265–267  
 Dendrochronology, 7, 12  
 Diaspore, 2, 125, 128, 131  
*Dioscorea*, 2, 65, 68–70, 72, 106, 114, 116, 117, 140, 165, 169, 175, 217, 226, 228, 233, 242  
 Distribution, 3, 7–13, 18–22, 26, 27, 29, 57–78, 85, 100, 101, 103, 114, 118, 124, 125, 134, 136, 150, 154–157, 212–231, 240, 255  
 Diversity, 1–3, 7–13, 18, 25, 26, 28, 29, 57–78, 81–94, 99–120, 124–126, 128–129, 135, 149–157, 161–177, 180, 201, 202, 213, 226, 231–233, 237, 238, 241, 242, 255–268  
 Diversity patterns, 265  
 Dominance pattern, 102, 115–117  
 Dominance–diversity curve, 115, 117, 119  
 Dominant taxa, 65–66, 68–74  
 Dry season length, 9, 24, 26

**E**  
 Eastern Ghats, 118, 126–128, 238  
 Eastern Himalayas, 99–120  
 Ecological aspects, 17–38  
 Ecological services, 162, 164–174  
 Economic services, 175  
 Ecosystem  
   functioning, 125, 126, 150, 212, 239, 259, 260, 265  
   processes, 2, 125, 240  
   services, 3, 161–177, 240  
 Endemic taxa, 66, 68–74  
 English ivy, 8, 10, 12, 234  
 Environmental factors, 76, 89–91, 100, 134  
 Eurasia, 57–78, 234  
 Evopotranspirational demand, 9  
 Explants, 189–192, 196–201

**F**  
 Fabaceae, 20, 22–24, 26, 33, 83, 103–107, 109–111, 134, 184, 214, 217, 220, 221, 224, 225, 231, 233, 234  
 Faunal assemblage, 135, 176  
 Florivores, 165, 167, 168, 170  
 Foliar herbivores, 164, 165, 167, 168, 170, 176  
 Forest  
   biomass, 150, 153, 180  
   canopy, 44, 48, 82, 88, 89, 92, 99, 124, 151, 156, 157, 260  
   disturbance, 3, 9, 28, 87–89, 124, 126, 134, 256, 260–263, 266–268  
   dynamics, 2, 3, 9, 44, 45, 47, 82, 100, 154  
   management, 10, 91–93, 267  
   recovery, 29, 49  
   structure, 7, 18, 125, 149, 150, 162, 176, 180, 242  
 Fragmentation, 28, 44, 45, 49, 87, 256–258, 262, 266, 267  
 Frugivores, 165, 167, 168, 170  
 Functional ecology, 3, 177  
 Functional traits, 123–145

**G**  
 Gap dynamics, 28  
 Geographical aspects, 17–38  
 Global change, 124

**H**  
 Himalaya, 59, 65–70, 76, 100, 118  
 Human disturbance, 10, 86–89, 94  
 Human health, 176, 212  
 Hunting, 87, 256, 264–266, 268  
 Hymenopterans, 165, 172

**I**  
 Indo-Malaya, 118  
 Infestation, 47, 48, 89, 91, 92, 213, 225, 232, 234, 236, 239  
 Invasive vines, 212–243  
*Ipomoea*, 2, 61, 69, 71, 108, 141, 169, 218, 225–228, 231

**J**  
 Japanese honeysuckle, 8, 10, 232  
*Jasminum*, 66, 69, 108, 114, 141, 142, 165, 169

**L**

- Lantana camara*, 135, 142, 174, 213, 219, 228, 237–240  
 Large vessel elements, 9  
 Leaf traits, 125  
 Lepidopterans, 2, 135, 162, 165, 172, 176  
 Liana(s)  
   abundance, 3, 7–13, 27, 28, 44, 49, 85–94, 100, 119, 124, 130–132, 153, 157, 164, 165, 257, 258, 260, 262, 263, 265  
   assemblage, 81–94  
   colonisation, 27  
   communities, 7, 10–12, 26, 28, 44, 83, 84, 103, 124, 162, 175, 177, 260, 262, 263, 265, 267, 268  
   cutting, 29, 91–94, 152, 153, 157, 259, 260, 267  
   diversity, 3, 11–12, 25, 26, 58, 72, 82–85, 87–91, 94, 100, 102–115, 124, 126, 128, 135, 154–156, 161–177, 255–268  
 Litter production, 236  
 Livelihood, 94, 175–177  
 Logging, 24, 27–29, 44, 50, 87, 91–93, 232, 256, 258–260, 262, 264, 266, 267  
 Low land tropical forest, 150, 151, 155

**M**

- Malay Archipelago, 58, 60, 63, 65, 66, 68, 75, 77  
 Mean annual precipitation (MAP), 9, 25, 26, 155  
 Medicinal lianas, 179–202  
 Mediterranean, 59, 66, 71, 72, 75  
 Micro environment, 213  
 Micropropagation, 188–190, 196–202  
*Mikania micrantha*, 2, 109, 116, 213, 220, 235–237  
 Montane sub tropical forest, 100, 101, 113, 115, 117, 118

**N**

- Natural disturbance, 10, 124, 154  
 Negative impacts, 150, 212, 236, 239, 260  
 Neo tropical forest, 26, 126, 150, 153, 157, 265  
 Niche partitioning, 152, 155  
 Nitrogen deposition, 28, 29  
 Non timber forest product, 126, 162  
 North Africa, 57–78  
 North-eastern India, 99–120, 236

**O**

- Old World forests, 63–64, 77, 126  
 Oligarchy, 26, 27  
 Orthoptera, 176  
 Over exploitation, 2, 3, 180

**P**

- Pan tropical, 9, 155–156  
 Permanent plots, 11, 24, 46, 47  
 Phenology, 135, 151  
*Piper*, 65, 69, 143  
 Pollination, 176, 177, 231, 240, 257  
*Pueraria tuberosa*, 110, 116, 181, 186, 188–190, 194, 195, 198, 201

**R**

- Rainfall, 9, 10, 20, 25, 28, 44, 52, 83, 86, 90, 94, 100, 124, 126, 134, 135, 154–156, 163  
 RAPD markers, 201  
 Recruitment, 2, 28, 44, 46, 48, 51, 82, 88, 89, 152, 157, 259, 262, 267  
 Red Data Book, 102, 117, 118  
 Regeneration, 2, 7, 28, 29, 49–52, 82, 87, 88, 91, 93, 100, 119, 120, 124, 150, 162, 180, 188–191, 196–200, 213, 221, 231, 233, 237, 261  
 Resource values, 175, 214–224, 240  
 Resources, 2, 3, 13, 44, 47, 48, 82, 88, 119, 150, 151, 162, 165, 172, 175–177, 180, 188, 213, 227, 237, 240, 241, 259, 262, 265  
 Rubiaceae, 36, 63–65, 69, 71–73, 77, 109, 112, 138, 142, 143, 220

**S**

- Seasonal drought, 3, 9, 47, 157, 262  
 Seasonally dry tropical forest, 20  
 Secondary forest, 44, 49–52, 84, 85, 88  
 Secondary metabolites, 189, 192–196  
 Seed dispersal, 125, 135, 176, 177, 236, 265, 266  
 Seedling bank, 261  
 SEF. *See* Semi-evergreen forest (SEF)  
 Semi deciduous forest, 18–21, 24–27, 29  
 Semi-evergreen forest (SEF), 118, 126–132, 134–136, 138, 140, 142, 144  
 Sequestration, 2, 52, 100  
 Shannon index, 102, 103, 113, 114

Shoot culture, 190–192, 194  
 Silviculture, 231  
 Simpson index, 102, 103, 113  
 Southeast Asia, 3, 81–94, 235  
 Species  
   biology, 235–240  
   dominance, 26, 115–117  
   survival, 177, 180  
*Strychnos*, 34, 111, 144, 151, 163, 164,  
   171, 174  
 Sub Sahara, 60, 63–65  
 Subtropical forest, 17–38, 103, 114, 115,  
   118, 119  
 Succession, 44, 49–52, 236, 237, 239, 261  
 Sustainable development, 3, 176  
 Sustainable utilization, 28–38, 179–202

## T

Taxonomical aspects, 17–38  
 Taxonomic diversity, 128–129  
 Temperate forest, 7–13, 18, 82, 100, 101,  
   103–115, 117–119, 150  
*Tetrastigma*, 65, 111, 114, 116, 144  
 Timber resource, 91, 162, 258, 259  
 Topography, 90  
 Transformed cultures, 195–196, 202  
 Tree growth, 3, 44, 45, 47, 49, 51, 52, 150,  
   152, 258  
 Tree mortality, 3, 45, 48, 52, 150, 152, 258,  
   261–263

Treefall gaps, 49, 51, 124, 152, 154, 156, 157,  
   260–262, 266  
 Tropical dry evergreen forest, 161–177  
 Tropical forests, 2, 7, 18, 43–52, 66,  
   81–94, 100, 123–145, 150, 162,  
   180, 255–268

## V

Venn diagram, 23  
 Vitaceae, 22, 38, 63–65, 68, 69, 72,  
   77, 103–105, 109, 111, 128,  
   134, 136–139, 144, 167, 168,  
   183, 187, 214  
*Vitis*, 2, 8, 61, 72, 75, 151, 181, 187, 226

## W

WEF. *See* Wet-evergreen forest (WEF)  
 Western Ghats, 118, 126–128  
 Wet-evergreen forest (WEF), 126–132,  
   134–136, 138, 140, 142, 144  
 Wild life, 150, 151, 233  
 Wood density, 3, 45, 46, 52, 180  
 Wood productivity, 45, 47–48  
 Woody vines, 7, 11, 13, 99, 112,  
   231–234, 242

## Z

*Ziziphus*, 128, 145, 171, 174, 175