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| **SQUAMATA** | | | | | | | | | | |
| **#** | **Learning task** | | | **Stimuli** | **Reward** | **Criterion** | **Species** | **Age-class** | **Origin** | **Source** |
| 1 | Spatial | 8-choice | Arena | Distal Cues | Heat | No criterion,  latency measured | *Acanthodactylus boskianus* | Adult | Wild | Day et al., 1999 |
| Local Cue |
| Light |
| Discrimination | 2-choice | Fork | Multiple | Food | 10/12 |
| Spatial | 8-choice | Arena | Distal Cues | Heat | No criterion,  latency measured | *Acanthodactylus scutellatus* |
| Local Cue |
| Light |
| Discrimination | 2-choice | Fork | Multiple | Food | 10/12 |
| 2 | Spatial | 2-choice | Arena | Location | Shelter | No criterion | *Amalosia*  *lesueurii* | Hatchling | Captive | Dayananda & Webb, 2017 |
| 3 | Taste Aversion | 1-choice | Arena | Taste | Food | No criterion,  eaten or not | *Anolis*  *carolinensis* | Adult | Captive | Stanger-Hall et al., 2001 |
| 4 | Conditioning | 1-choice | Runway | Colour | Food | No criterion,  proportion correct | *Anolis*  *cristatellus* | Adult/  Subadult | Wild | Shafir, 1995 |
| Discrimination | 2-choice | T-Maze |
| 5 | Motor Task | 1-choice | Wells | Multiple | Food | 6/6 | *Anolis*  *cristatellus* | Adult | Wild | Powell, 2012 |
| Discrimination | 2-choice | Wells | Colour |
| Reversal | 2-choice | Wells |
| Motor Task | 1-choice | Wells | Multiple | Food | 6/6 | *Anolis*  *evermanni* |
| Discrimination | 2-choice | Wells | Colour |
| Reversal | 2-choice | Wells |
| Motor Task | 1-choice | Wells | Multiple | Food | 6/6 | *Anolis*  *pulchellus* |
| Discrimination | 2-choice | Wells | Colour |
| Reversal | 2-choice | Wells |
| 6 | Discrimination | 2-choice | Wells | Colour | Food | 6/6 | *Anolis*  *evermanni* | Adult | Wild | Leal & Powell, 2012 |
| Reversal | 2-choice | Wells |
| 7 | Conditioning | 1-choice | Arena | Sound | Escape | No criterion,  80 trials | *Anolis*  *grahami* | Adult | Not Given | Rothblum et al., 1979 |
| 8 | Avoidance | 1-choice | Box | Shock | Relieve | No criterion,  number of shocks | *Anolis*  *sagrei* | Adult | Captive | Punzo, 1985 |
| 9 | Spatial | 8-choice | Arena | Multiple | Shelter | 8/10 | *Antaresia*  *maculosa* | Juvenile | Captive | Stone et al., 2000 |
| 10 | Taste Aversion | 1-choice | Arena | Taste | Food | No criterion,  remaining food  weighed | *Basiliscus*  *vittatus* | Subadult | Not Given | Paradis & Cabanac,  2004 |
| *Basiliscus*  *basiliscus* |
| *Eumeces*  *schneideri* |
| *Eutropis*  *multifasciata* |
| 11 | Spatial | 2-choice | Arena | Location | Shelter | No criterion,  16 trials | *Bassiana*  *duperreyi* | Hatchling | Captive | Amiel & Shine, 2012 |
| 12 | Discrimination | 2-choice | Y-Maze | Multiple | Food | No criterion,  15 trials | *Bassiana*  *duperreyi* | Hatchling | Captive | Amiel et al., 2014 |
| 13 | Motor Task | 1-choice | Wells | Multiple | Food | 5/6 | *Bassiana*  *duperreyi* | Hatchling | Captive | Clark et al., 2014 |
| Discrimination | 3-choice | Wells |
| Discrimination | 3-choice | Wells | Colour |
| Reversal | 3-choice | Wells |
| 14 | Discrimination | 2-choice | Arena | Colour | Food | No criterion,  number consumes | *Calotes*  *versicolor* | Hatchling | Captive | Shanbhag et al., 2010 |
| 15 | Spatial | 4-choice | Arena | Local Cues | Heat | No criterion,  latency measured | *Cnemidophorus inornatus* | Adult | Wild | Day et al., 2001 |
| 16 | Spatial | 2-choice | Arena | Multiple | Shelter | 2x6/8 | *Cnemidophorus inornatus* | Adult | Wild | Day et al., 2003 |
| 17 | Discrimination | n-choice | Natural Habitat | Colour | Food | No criterion,  volume and  damage recorded | *Cnemidophorus murinus* | Adult | Wild | Schall, 2000 |
| Location |
| 18 | Reversal | 2-choice | Y-Maze | Position | Food | 16/20 | *Coleonyx*  *variegatus* | Adult | Not Given | Kirkish et al., 1979 |
| Spatial | 2-choice | Y-Maze |
| 19 | Spatial | 3-choice | Vertical Maze | Multiple | Food | 5/6 | *Egernia*  *striolata* | Juvenile | Captive | Riley et al., 2016 |
| 20 | Motor Task | 1-choice | Wells | Multiple | Food | 5/6 | *Egernia*  *striolata* | Juvenile | Captive | Riley et al., 2018 |
| Social | Discrimination | Wells | Multiple | Food | 7/8 |
| Social | Reversal | Wells |
| 21 | Discrimination | 2-choice | Wells | Multiple | Food | 6/6 or 7/8 | *Egernia*  *striolata* | Adult | Wild | Szabo et al., 2018 |
| Reversal | 2-choice | Wells |
| 22 | Spatial | 2-choice | Arena | Location | Shelter | No criterion,  16 trials | *Eremias*  *argus* | Hatchling | Captive | Sun et al., 2014 |
| 23 | Reversal | 3-choice | Arena | Location | Shelter | 5/5 | *Eulamprus*  *quoyii* | Adult | Wild | Noble et al., 2012 |
| Spatial | 3-choice | Arena |
| 24 | Spatial | 2-choice | Arena | Location | Shelter | Significant  performance | *Eulamprus*  *quoyii* | Adult | Wild | Carazo et al., 2014 |
| 25 | Motor Task | 1-choice | Wells | Multiple | Food | 5/6 | *Eulamprus*  *quoyii* | Adult | Wild | Noble et al., 2014 |
| Discrimination | 2-choice | Wells |
| Social | 2-choice | Wells |
| 26 | Social | Discrimination | Wells | Multiple | Food | 5/6 | *Eulamprus*  *quoyii* | Adult | Wild | Kar et al., 2017 |
| Social | Reversal | Wells |
| 27 | Motor Task | 1-choice | Wells | Multiple | Food | 5/6 | *Eulamprus*  *quoyii* | Adult | Wild | Qi et al., 2018 |
| Discrimination | 3-choice | Wells | Multiple |
| Discrimination | 3-choice | Wells | Colour |
| 28 | Discrimination | 2-choice | Y-Maze | Multiple | Food | No criterion, 15 trials | *Lampropholis*  *delicata* | Adult | Wild | Bezzina et al., 2014 |
| Discrimination | 2-choice | Y-Maze | Multiple | Food | No criterion, 15 trials | *Lampropholis guichenoti* |
| 29 | Spatial | 2-choice | Arena | Location | Shelter | 5/6 | *Lampropholis*  *delicata* | Adult | Wild | Chung et al., 2017 |
| 30 | Discrimination | 2-choice | Y-Maze | Multiple | Shelter | 5/6 | *Lampropholis*  *delicata* | Adult | Wild | Kang et al., 2018 |
| Discrimination | 2-choice | Y-Maze | Colour |
| 31 | Avoidance | n-choice | Natural Habitat | Threat | Shelter | Defence reaction | *Leiocephalus schreibersii* | Adult | Wild | Marcellini & Jenssen, 1991 |
| 32 | Social | Discrimination | Wells | Multiple | Food | 7/8 | *Liopholis*  *whitii* | Adult | Wild | Munch et al., 2018 |
| Social | Reversal | Wells |
| 33 | Discrimination | 2-choice | Wells | Multiple | Food | No criterion,  20 trials | *Liopholis*  *whitii* | Juvenile | Captive | Munch et al., 2018 |
| Spatial | 2-choice | Arena | Location | Shelter |
| 34 | Conditioning | 1-choice | Key | Light | Food | No criterion,  20 trials | *Malpolon monspessulanus* | Not Given | Not Given | Gavish, 1979 |
| 35 | Spatial | 8-choice | Arena | Location | Shelter | No criterion,  latency measured | *Pantherophis*  *guttatus* | Juvenile | Captive | Holtzman et al., 1999 |
| 36 | Social | Enhancement | Arena | Multiple | Food | No criterion,  number of  individuals | *Podarcis*  *lilfordi* | Adult | Wild | Perez-Cembranos &  Perez-Mellado, 2015 |
| Social | Enhancement | Arena | Multiple | Conspecifics |
| Social | Enhancement | Arena | Multiple | Models |
| 37 | Spatial | 1-choice | Water Maze | Location | Escape | >6 for two  sessions | *Podarcis*  *sicula* | Adult | Wild | Foa et al., 2009 |
| 38 | Discrimination | 2-choice | Y-Maze | Quantity | Food | 75% correct 2  days, >chance  120 trials | *Podarcis*  *sicula* | Adult | Wild | Petrazzini et al., 2018 |
| Discrimination | 2-choice | Y-Maze | Size |
| 39 | Motor Task | 1-choice | Wells | Multiple | Food | 7/7 or 7/8 | *Podarcis*  *sicula* | Adult | Wild | Damas-Moreira et al., 2018 |
| Discrimination | 3-choice | Wells | Colour |
| Social | 3-choice | Wells |
| 40 | Social | Bidirectional | Door | Direction | Food | No criterion,  10 trials | *Pogona*  *vitticeps* | Adult | Captive | Kis et al., 2015 |
| 41 | Social | Bidirectional | Door | Direction | Food | No criterion,  10 trials | *Pogona*  *vitticeps* | Adult | Captive | Siviter et al., 2017 |
| 42 | Discrimination | 2-choice | Arena | Shape | Food | Minimum 5/6 | *Pseudopus*  *apodus* | Adult | Wild | Ivazov, 1983 |
| 43 | Conditioning | 1-choice | Key | Light | Food | No criterion,  latency measured | *Python*  *molurus* | Mixed | Mixed | Emer et al., 2015 |
| 44 | Spatial | 4-choice | Arena | Location | Food | No criterion | *Sceloporus*  *poinsettii* | Adult | Captive | Punzo, 2002 |
| 45 | Avoidance | n-choice | Natural Habitat | Threat | Shelter | No criterion, hiding time and FID | *Sceloporus*  *undulatus* | Adult | Wild | Thaker et al., 2010 |
| 46 | Taste Aversion | 2-choice | Arena | Taste | Food | No criterion | *Sceloporus*  *undulatus* | Juvenile | Wild | Robbins et al., 2013 |
| 47 | Spatial | 2-choice | Arena | Location | Shelter | No criterion,  latency measured | *Scincella*  *lateralis* | Adult | Wild | Paulissen, 2008 |
| Spatial | 2-choice | Arena | Location +  Experience |
| 48 | Discrimination | 2-choice | Arena | Pattern | Shelter | 5/5 | *Scincella*  *lateralis* | Adult | Wild | Paulissen, 2014 |
| 49 | Discrimination | 2-choice | Arena | Multiple | Shelter | No criterion,  time at location | *Tiliqua*  *rugosa* | Adult | Wild | Zuri & Bull, 2000 |
| 50 | Taste Aversion | 1-choice | Arena | Taste | Food | No criterion,  remaining food | *Tiliqua*  *scincoides* | Adult/  Subadult | Mixed | Price-Rees et al., 2011 |
|
| 51 | Spatial | 8-choice | Radial  Arm Maze | Location | Food | 40 trial 6/18 correct  in last 20 trials | *Timon*  *lepidus* | Adult/  Subadult | Captive | Mueller-Paul et al., 2012 |
| 52 | Avoidance | 1-choice | Shuttle Box | Light | Relieve | Mean %  avoidance | *Tupinambis*  *teguixin* | Juvenile | Not Given | Yori, 1978 |
| 53 | Spatial | 10-choices | Barnes Maze | Location | Shelter | 3/3 | *Uta*  *stansburiana* | Subadult | Captive | LaDage et al., 2012 |
| 54 | Problem Solving | 1-choice | Puzzle  Box | Visual | Food | No criterion,  3 trials | *Varanus*  *albigularis* | Juvenile | Captive | Manrod et al., 2008 |
| 55 | Discrimination | 2-choice | Target | Brightness | Food | 2x8/10 | *Varanus komodoensis* | Adult | Captive | Gaalema, 2007 |
| Reversal | 2-choice | Target |
| Reversal | 2-choice | Target |
| 56 | Discrimination | 2-choice | Target | Brightness | Food | 2x8/10 | *Varanus*  *rudicollis* | Adult | Not Given | Gaalema, 2011 |
| Reversal | 2-choice | Target |
| Reversal | 2-choice | Target |
| **RHYNCHOCEPHALIA** | | | | | | | | | | |
| **#** | **Learning task** | | | **Stimuli** | **Reward** | **Criterion** | **Species** | **Age-class** | **Origin** | **Source** |
| 57 | Discrimination | 2-choice | Arena | Frequency | Food | No criterion | *Sphenodon*  *punctatus* | Juvenile | Captive | Woo et al., 2009 |
| **TESTUDINES** | | | | | | | | | | |
| **#** | **Learning task** | | | **Stimuli** | **Reward** | **Criterion** | **Species** | **Age-class** | **Origin** | **Source** |
| 58 | Spatial | 8-choice | Radial  Arm Maze | Location | Food | No criterion,  number correct | *Chelonoidis carbonaria* | Adult | Captive | Wilkinson et al., 2007 |
| 59 | Spatial | 8-choice | Radial  Arm Maze | Location | Food | No criterion,  number correct | *Chelonoidis carbonaria* | Adult | Captive | Wilkinson et al., 2009 |
| 60 | Social | Detour | Arena | Multiple | Food | No criterion,  goal reached | *Chelonoidis carbonaria* | Juvenile/  Subadult | Not Given | Wilkinson et al., 2010 |
| 61 | Social | Detour | Arena | Multiple | Food | No criterion,  goal reached | *Chelonoidis carbonaria* | Juvenile/  Subadult | Not Given | Wilkinson & Huber, 2012 |
| 62 | Discrimination | 2-choice | Arena | Visual | Food | No criterion,  number correct | *Chelonoidis carbonaria* | Subadult | Captive | Wilkinson et al., 2013 |
|
| 63 | Discrimination | 2-choice | Touch Screen | Position | Food | Last 3 blocks  above chance | *Chelonoidis carbonaria* | Juvenile | Captive | Mueller-Paul et al., 2014 |
| Discrimination | 2-choice | Arena | Position | Food | No criterion,  20 trials |
| Reversal | 2-choice | Touch Screen | Position | Food | Last 3 blocks  above chance |
| Reversal | 2-choice | Arena | Position | Food | No criterion,  20 trials |
| 64 | Discrimination | 2-choice | Arena | Quantity | Food | no criterion | *Chelonoidis carbonaria* | Subadult | Captive | Soldati et al., 2017 |
| 65 | Discrimination | 2-choice | Keys | Intensity | Food | 80% 2 days | *Chrysemys*  *picta* | Adult | Not Given | Reiner &  Schade Powers, 1978 |
| Discrimination | 2-choice | Keys | Pattern | Food | 90% 2 days |
| 66 | Discrimination | 2-choice | Keys | Intensity | Food | 80% 2 days | *Chrysemys*  *picta* | Not Given | Not Given | Reiner & Powers, 1980 |
| Discrimination | 2-choice | Keys | Pattern | Food | 90% 2 days |
| 67 | Discrimination | 2-choice | Keys | Multiple | Food | 17/20 | *Chrysemys*  *picta* | Adult | Not Given | Cranney & Powers,  1983 |
| Reversal | 2-choice | Keys |
| ED Shifts | 2-choice | Keys |
| 68 | Discrimination | 2-choice | Keys | Intensity | Food | 80% 2 days | *Chrysemys*  *picta* | Adult | Not Given | Reiner & Powers, 1983 |
| Discrimination | 2-choice | Keys | Pattern | Food | 90% 2 days |
| 69 | Discrimination | 2-choice | Keys | Pattern | Food | Mean latency  difference of  48s for 4 days | *Chrysemys*  *picta* | Adult | Not Given | Grisham & Powers, 1989 |
| 70 | Discrimination | 2-choice | Keys | Pattern | Food | 17/20 | *Chrysemys*  *picta* | Adult | Not Given | Blau & Powers, 1989 |
| 71 | Discrimination | 2-choice | Keys | Position | Food | 2x17/20 | *Chrysemys*  *picta* | Adult | Not Given | Grisham & Powers, 1990 |
| Reversal | 2-choice | Keys |
| 72 | Spatial | 3-choice | X-Maze | Location | Water | 67% 2 days | *Chrysemys*  *picta* | Adult | Not Given | Petrillo et al., 1994 |
|
| 73 | Discrimination | 2-choice | T-Maze | Position | Food | 2/3 for 2 days | *Chrysemys*  *picta* | Adult | Not Given | Avigan & Powers, 1995 |
| 74 | Discrimination | 3-choice | Keys | Multiple | Food | Probability  of response | *Chrysemys*  *picta* | Adult | Not Given | Yeh & Powers, 2005 |
| 75 | Discrimination | 2-choice | Keys | Multiple | Food | No criterion, responses  per day | *Chrysemys*  *picta* | Subadult | Not Given | Powers et a., 2009 |
| Negative Patterning | 3-choice | Keys |
| 76 | Spatial | n-choice | Natural Habitat | Multiple | None | No criterion | *Chrysemys*  *picta* | Adults/  Juveniles | Mixed | Roth & Krochmal, 2015 |
| Discrimination | 2-choice | Y-Maze | UV | None | No criterion, proportion correct |
| Odour |
| 77 | Conditioning | 1-choice | Runway | Quantity | Food | No criterion,  latency measured | *Mauremys*  *reevesii* | Adult | Not Given | Papini & Ishida, 1994 |
| 78 | Conditioning | 1-choice | Runway | Location | Food | No criterion,  latency measured | *Mauremys*  *reevesii* | Adult | Not Given | Ishida & Papini, 1997 |
| 79 | Discrimination | 2-choice | Bottles | Visual | Food | No criterion,  latency measured | *Pseudemys*  *nelsoni* | Adult | Captive | Davis & Burghardt, 2007 |
| 80 | Social | Discrimination | Bottles | Brightness | Food | 6/6 | *Pseudemys*  *nelsoni* | Adult | Captive | Davis & Burghardt, 2011 |
| 81 | Discrimination | 2-choice | Bottles | Food Pellet | Food | 6/6 | *Pseudemys*  *nelsoni* | Adult | Captive | Davis & Burghardt, 2012 |
| 82 | Discrimination | 2-choice | Target | Brightness | Food | 9/10 for 5  sessions | *Terrapene*  *carolina* | Adult | Captive | Leighty et al., 2013 |
| Discrimination | 2-choice | Target | Brightness | Food | 11/12 for 5 sessions |
| Discrimination | 2-choice | Target | Brightness | Food | No criterion |
| Discrimination | 2-choice | Target | Brightness | Food | 9/10 for  5 sessions |
| 83 | Spatial | 4-choice | 4-Arm Maze | Distal Cues | Food | 13/15 | *Trachemys*  *scripta* | Juvenile | Not Given | Lopez et al., 2000 |
| Local Cue |
| 84 | Spatial | 4-choice | Water Maze | Distal Cues | Food | 9/18 | *Trachemys*  *scripta* | Subadult | Not Given | Lopez et al., 2001 |
| Local Cue |
| 85 | Spatial | 4-choice | 4-Arm Maze | Distal Cues | Food | 13/15 | *Trachemys*  *scripta* | Juvenile | Not Given | Lopez et al., 2003a |
| Local Cue |
| 86 | Spatial | 4-choice | Water Maze | Distal Cues | Food | 9/18 | *Trachemys*  *scripta* | Juvenile | Not Given | Lopez et al., 2003b |
| **CROCODILIA** | | | | | | | | | | |
| **#** | **Learning task** | | | **Stimuli** | **Reward** | **Criterion** | **Species** | **Age-class** | **Origin** | **Source** |
| 87 | Taste Aversion | 1-choice | Arena | Taste | Food | No criterion,  eaten or not | *Crocodylus*  *johnstoni* | Juvenile | Wild | Somaweera et al., 2011 |